

Canterbury Conservation Management Strategy

Volume 1

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Foreword

Canterbury is rich in its variety of indigenous plants and animals, its historic heritage and relics, and its landscapes.

Its physical features are dramatic, ranging from the majestic Southern Alps to the Canterbury Plains, from forested foothills to rocky coastlines and sandy beaches. These features also provide a wealth of recreational opportunities.

The Department of Conservation's Canterbury Conservancy is responsible for some 1293 units of land, and for the protection of important natural resources generally.

To help manage these resources and activities the Conservancy, in consultation with the then North Canterbury and Aoraki Conservation Boards, has prepared a Conservation Management Strategy (CMS).

The CMS sets out the management directions the Conservancy will take for the next ten years, the objectives it wants to achieve and the means by which it will achieve these.

The draft CMS was released for public comment on 18 November 1995. Submissions closed on 1 April 1996, and 174 were received. Public oral submissions were heard in May and June of 1996. Consultation with Ngāi Tahu Papatipu Rūnanga occurred from July to December 1996, and with Te Rūnanga o Ngāi Tahu from July 1996 to May 1997. A summary of submissions and a decision schedule indicating the extent of acceptance of all submissions was prepared and given full consideration in revising the draft CMS.

The revised draft CMS and summary of submissions was presented to the Conservation Boards for their consideration. The Boards requested further amendments to ensure that the document paid due attention to public opinion as expressed through formal submissions and other consultation.

In April 1998, the Boards submitted the CMS to the New Zealand Conservation Authority for approval. The Authority consulted the Minister of Conservation and Te Rūnanga o Ngāi Tahu and requested further amendments. The amendments were made and the New Zealand Conservation Authority subsequently approved this Conservation Management Strategy on 14 June 2000.



Sir Duncan McMullin
Chairperson
New Zealand Conservation Authority
July 2000

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1. Introduction

1.1 What is a Conservation Management Strategy?

Conservation Management Strategies (CMSs) are a statutory requirement of the Conservation Act 1987. All Conservancies of the Department of Conservation must prepare a CMS.

CMSs implement general policies and establish objectives for the integrated management of natural and historic resources, including any species, managed by the Department of Conservation under the:

- Conservation Act 1987
- Wildlife Act 1953
- Marine Reserves Act 1971
- Reserves Act 1977
- Wild Animal Control Act 1977
- Marine Mammals Protection Act 1978
- National Parks Act 1980
- New Zealand Walkways Act 1990

and for recreation, tourism and other conservation purposes.

In the past the Department prepared separate management plans for areas and species. The CMS is a new approach that provides for the integrated management of all areas, species and activities managed by the Department within a Conservancy.

The CMS provides an integrated picture of the Department's conservation management and advocacy, and a clear sense of strategic direction to develop over the ten-year span of the CMS. The Canterbury CMS answers the following basic questions:

- What are the conservation issues in Canterbury?
- What realistic objectives will be set for the next ten years?
- How will the Department liaise with individuals and groups to maximise conservation?
- What are the Department's statutory obligations?
- What are the Department's priority tasks in Canterbury?

The Canterbury CMS outlines the Department's role in the management of natural and historic resources within the Canterbury Conservancy area of the Department of Conservation. The Conservancy covers 48,500 square kilometres of land east of the main divide, from the Conway and Clarence Rivers in the north to the Waitaki River catchment in the south and the territorial sea (see Map 1).

The CMS identifies all areas – marine and terrestrial – managed by the Conservancy. They are identified and described in Volume 2, as required by section 17D of the Conservation Act.

The CMS covers the management of protected species, the protection of freshwater fish and marine mammals, and wild animal control – across all land, freshwater and ocean areas in the Conservancy. This is because the Department has the statutory responsibility for protecting the species across all ecosystems, even when the Department may not be responsible for managing that area.

Raising public awareness and knowledge on conservation issues helps protect natural and historic resources. The CMS outlines how this occurs, through interpretation and advocacy, for issues both on and off land managed by the Department.

The document will be a practical working guide for managers and staff, and will provide a clear conservation vision for this Conservancy. The CMS provides a reference for the public and other organisations on the future management of natural and historic resources in this Conservancy.

The CMS is intended to replace most of the existing conservation management plans (CMPs), which focused on particular areas or land units. The CMS also provides an overview of when CMPs and functional strategies will be required for this Conservancy. Current operative CMPs in Canterbury include the 2 national park management plans, 29 reserve management plans, and a number of conservation area management plans.



1.2 Functions and Roles

The Conservation Act 1987 promotes the conservation of New Zealand's natural and historic resources. The Department of Conservation, the New Zealand Conservation Authority and 17 regional conservation boards were established by the Act.¹

The Authority and Boards have an oversight and advisory role on the Department's operations. The bodies provide a statutory link between the Department and the public, and help to ensure that the Department's management is in tune with the wishes of the community.

New Zealand Conservation Authority

The New Zealand Conservation Authority (NZCA) comprises thirteen members appointed by the Minister of Conservation. Five are appointed after consultation with the Ministers of Māori Affairs, Tourism and Local Government. A further four are appointed on the recommendation of the Royal Society of New Zealand, Royal Forest and Bird Protection Society, Federated Mountain Clubs and Te Rūnanga o Ngāi Tahu. Four persons are appointed from public nominations. NZCA functions include:

- approving conservation management strategies, national park management plans and some conservation management plans
- approving national park general policy

¹ The Act also established the New Zealand and regional Fish and Game Councils.

- advising the Minister on statements of general policy
- investigating and advising the Minister or Director-General on conservation matters of national importance
- reviewing and reporting on the Department's management and budget priorities
- liaising with the New Zealand Fish and Game Council

In approving a CMS, the Authority must have regard to any recommendations of the Minister. The Minister of Conservation approves all policy (except national park policy) and the Director-General then implements the policy.

Conservation Boards

The 14 conservation boards have a regional focus with specific responsibilities for their area. The boards' members are mostly appointed from public nominations. Boards whose areas of jurisdiction lie wholly within the Ngāi Tahu Takiwā have at least two members appointed on the nomination of Te Rūnanga o Ngāi Tahu.

Conservation board functions include:

- overseeing the preparation of a CMS for a region (also CMS reviews and amendments)
- overseeing the preparation of national park management plans (also reviews and amendments)
- approving conservation management plans (also reviews and amendments)
- advising the NZCA and Director-General on regional conservation matters
- advising on new walkways in the region
- liaising with regional Fish and Game Councils

Boards may also pursue these interests at public forums and statutory hearings.

The conservation board in the Canterbury Conservancy is the Canterbury/Aoraki Board.

Canterbury Conservancy

The Canterbury Conservancy of the Department includes five area offices in Canterbury. The Conservancy office is in Christchurch. Area offices are Waimakariri (Arthur's Pass), North Canterbury (Christchurch), Raukāpuka (Geraldine), Twizel (Twizel), and Aoraki (Aoraki/Mount Cook). Smaller field centres with permanent staff are at Hanmer Springs, Akaroa and Mount Thomas (see Map 1).

The Department's functions include:

- administering the Conservation Act (including the enactments specified in the First Schedule of that Act)
- managing, for conservation purposes, all land and other natural and historic resources held by the Department or entrusted to it under the Conservation Act
- preserving so far as is practicable all indigenous freshwater fisheries, and protecting recreational freshwater fisheries and freshwater fish habitats
- advocating the conservation of natural and historic resources generally
- promoting the benefits to present and future generations of conserving natural and historic resources, and international co-operation on matters relating to conservation
- preparing, providing, disseminating, promoting and publicising educational and promotional material relating to conservation
- fostering the use of natural and historic resources for recreation and allowing their use for tourism, to the extent that the use of such resources is not inconsistent with their conservation,
- advising the minister on matters relating to any of those functions or to conservation generally.

Within Canterbury the Department manages:

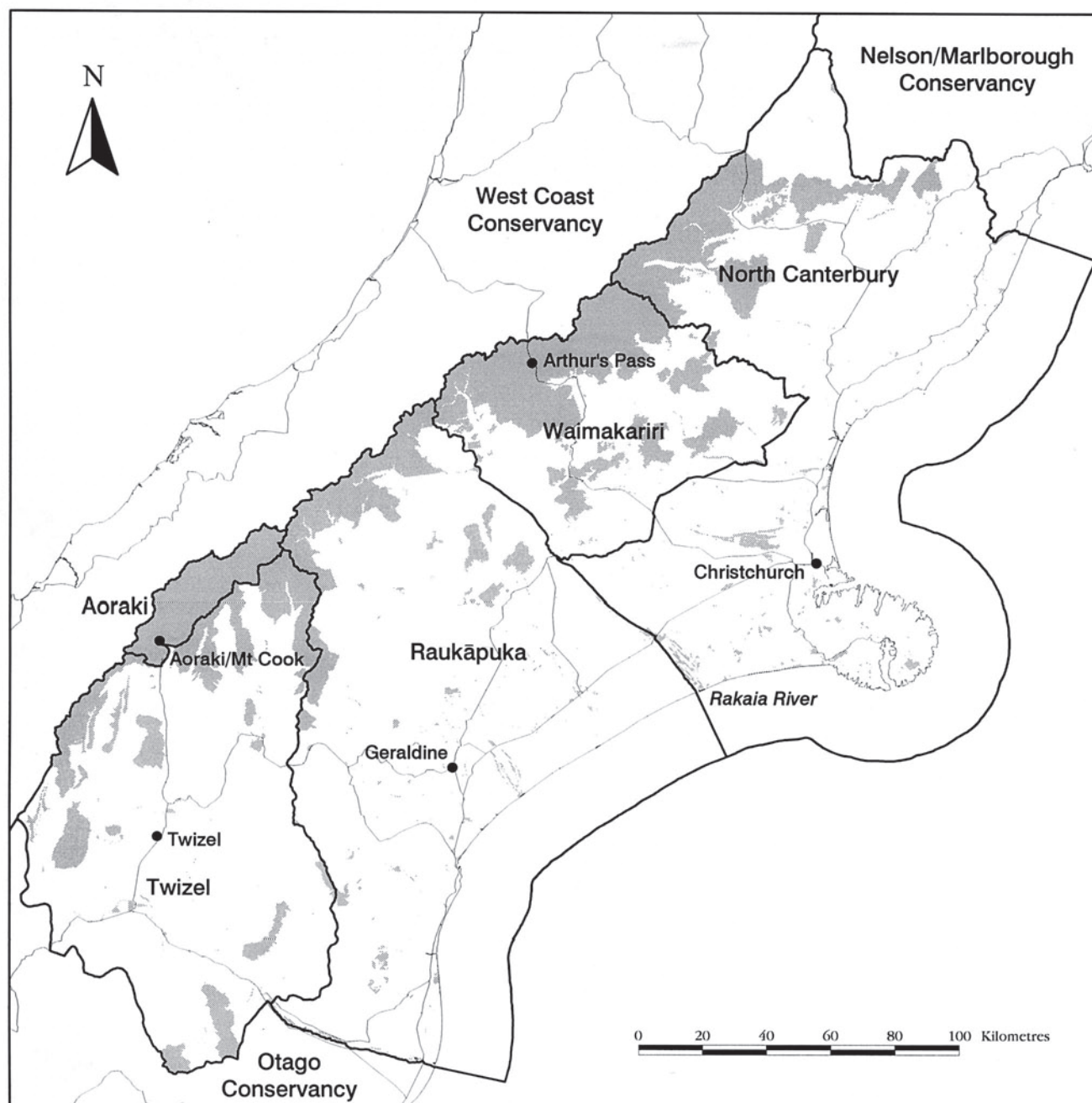
- part of the South-West New Zealand (Te Wāhipounamu) World Heritage Area (see 4.10 Waitaki, Map 13)
- two national parks
- three conservation parks
- other reserves and conservation areas
- about 770,000 hectares of land
- 800 kilometres of coastline (no marine reserves)

A marine mammal sanctuary has been set up on Banks Peninsula to protect Hector's dolphin.

Eight of Canterbury's thirteen commercial and club ski-fields are on land managed by the Department.

Map 1: Canterbury Conservancy

Map 1 Canterbury Conservancy



- Area boundaries
- State highway
- Land managed by the Department
- Area Office

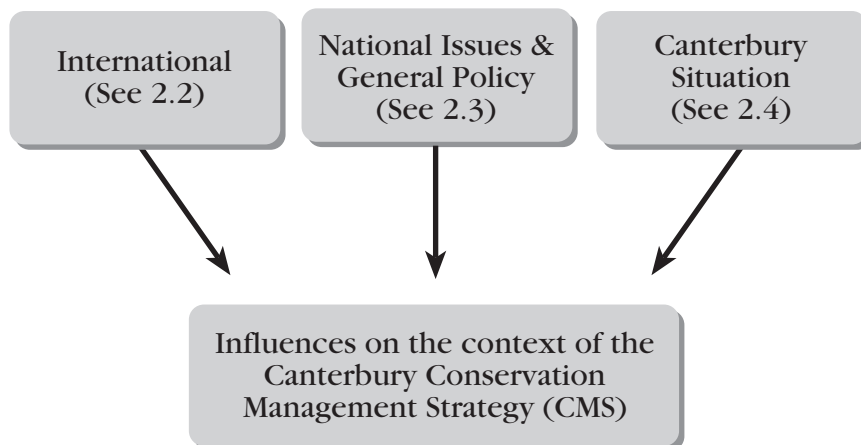
2. CMSContext

2.1 Introduction

CMSContext

The Canterbury Conservation Management Strategy (CMS) cannot be developed or operated in isolation from wider issues surrounding it.

These wider issues operate at international, national and regional levels. A full understanding and appreciation of factors other than legislation which will influence the CMS (by forming a background to it) is a necessary first step. They can be illustrated as follows:



2.2 International Obligations

The Conservation Management Strategy (CMS) should assist with implementing three international treaties that the New Zealand Government has ratified, however the CMS cannot introduce requirements that would conflict with existing law.

The Convention on Biological Diversity (CBD)

Purpose: To sustainably manage biological diversity.

The Convention on Biological Diversity (CBD) (Environmental Law and Institutions...1992) was signed by world leaders at Rio de Janeiro in 1992, as part of the United Nations Conference on Environment and Development (UNCED) process.

The Treaty seeks to conserve and manage the world's biological diversity in a sustainable manner, while ensuring that the benefits from the use of these genetic resources are fairly shared. The focus for conservation is on *in situ* measures, complemented by *ex situ* measures.

The measures required are to:

- identify and monitor important components of biological diversity
- establish and manage protected areas
- sustainably manage biological resources both within and outside protected areas
- rehabilitate and restore degraded ecosystems
- control alien species
- involve indigenous and local communities
- protect threatened species

The Convention on Biological Diversity acknowledged that:

- conservation is a common concern for all governments and people, and is necessary for sustaining future human survival and well-being
- conservation means the maintenance of functioning ecosystems as well as saving threatened species

The obligation on the Department is to reflect the provisions of the convention in the Department's strategies, plans and programmes.

The International Charter of Maintenance and Restoration of Monuments and Monumental Places

Purpose: To maintain and enhance cultural heritage values and sites.

The International Charter of Maintenance and Restoration of Monuments and Monumental Places (Second International Congress...1964), signed in Venice in 1964, sets out principles to guide the conservation of places of cultural heritage value. The body behind the charter is the International Council on Monuments and sites (ICOMOS). A New Zealand national committee has adopted a charter (*ICOMOS New Zealand charter for the conservation of places of cultural heritage value* 1993) to provide guidelines for community leaders, organisations and individuals concerned with cultural heritage.

The charter:

- defines cultural heritage values
- discusses indigenous cultural heritage
- outlines conservation practice
- suggests conservation principles to be applied
- outlines intervention process

The obligation on the Department is to work within the practices, principles and processes of the New Zealand charter.

Convention for the Protection of World Culture and Natural Heritage – World Heritage Convention

Purpose: To protect worldwide heritage of such universal value that its conservation is of concern to all people.

Within the Conservancy, the Aoraki/Mount Cook National Park and much of the Hopkins-Huxley catchment is included within the listed South-West New Zealand (Te Wāhipounamu) World Heritage Area.

The obligation on the Department is to ensure the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage of the listed site.

2.3 New Zealand

2.3.1 Introduction

New Zealand's wild and unspoiled places, its indigenous flora and fauna, its historic buildings and sites of cultural and spiritual significance, and its outstanding recreation opportunities are a priceless taonga or treasure. They belong to the people of New Zealand/Aotearoa and are managed on their behalf by the Department. They comprise a rich, distinct and irreplaceable indigenous heritage of great antiquity.

The public of New Zealand strongly support protection of this heritage, as indicated in various public survey polls. The remarkable collection of landscapes, plants and animals that exist here are central to our identity as a nation: we are known as Kiwis, and the silver fern is our national symbol. These symbols and principles are important elements in our way of life. The rich variety of places and sites are particularly significant in Māori and European cultural tradition.

As a society, we have valued and maintained the principle of free public access to our conservation heritage. This has been supported by the liberal public access policy originating from Queen Victoria's edict to early surveyors that future generations have access to our lakes, rivers and coastline. This access provision has been adopted as a matter of national importance in the Resource Management Act 1991.

Public concern for our natural, historic and recreation values led to the establishment of the national and forest parks and reserves systems. A number of former government agencies were involved, such as the Department of Lands and Survey and the New Zealand Forest Service, before the environmental reforms in the late 1980s led to the formation of the Department of Conservation.

This heritage is now the cornerstone of one of the country's largest and fastest growing major industries – tourism. Overseas tourist growth has been substantial over recent years, and visitors to national parks and other areas managed by the Department are a major feature of this growth. This demand has been propelled by a desire to see natural landscapes and participate in natural experiences, increasingly sought by free and independent visitors.

More than one million tourists visited New Zealand in 1993, earning our country \$3.1 billion, and generating 150,000 jobs. A goal has been set for the year 2000 to achieve \$9 billion worth of foreign exchange earnings and to create an additional 120,000 jobs in the New Zealand economy. Any increase in visitor numbers could have unavoidable impacts on the land and bring various management issues to the fore.

2.3.2 Conservation Issues

Five critical issues were raised by the Department in *Greenprint: conservation in New Zealand – a strategic overview* (1996), a briefing paper presented to the incoming Government. These were:

1. Turning around the decline in New Zealand's indigenous biodiversity.

This remains the biggest challenge facing the Department. The big issues are:

- Forest collapse: Damage to tree canopies, ground cover and regenerating species by possums and other browsing animals threatens to destroy forest ecosystems.
- Threatened species: New Zealand has more than 400 threatened species. Increasingly the focus is on integrated species and ecosystem management at key sites, extending experience gained on offshore islands to mainland islands.
- Marine: Less than 4 per cent of New Zealand's marine area is currently protected. There are no marine reserves established in Canterbury, although two applications have been made by community/recreation groups.
- Community understanding of the need for action on private land: Public understanding of the need to protect habitats and species on private and other public lands is vital for indigenous biodiversity conservation.
- Use of toxins for pests and weeds: The community's continued acceptance of the use of toxins in the short- and medium-term is vital if critical biodiversity is not to be lost.
- The development of a New Zealand Biodiversity Strategy, as required under the Convention on Biological Diversity (Environmental Law and Institutions Programme Activity Centre. 1992).

2. Ensuring that the most valuable ecosystems are protected in the conservation estate and that the estate is representative of the range of New Zealand biodiversity, so that conservation of our natural heritage is assured.

Major ecosystems, such as tussocklands, wetlands, dunelands and marine environments are currently under-represented.

3. Consolidating the new systems of quality assurance and accountability developed after the Cave Creek tragedy.

Introducing Quality Conservation Management will involve:

- the development and introduction of new systems
 - significant departmental restructuring to reflect the increased emphasis on accountability for quality throughout the Department
 - a progressive extension to all of the Department's activities
4. Reconciling the Department's responsibility under section 4 of the Conservation Act to give effect to the principles of the Treaty of Waitangi with its overall conservation mission.

This includes, for example, the Department assisting the Office of Treaty Settlements in the resolution of Treaty settlements, and issues around access to cultural materials.

5. Recognising that the public interest in conservation, both within New Zealand and internationally, is high, and that many conservation issues engender heated public debate.

The issues here are:

- the need to raise public awareness of the Department's role
- the need to streamline and rationalise processes of consultation with the community
- meeting obligations under international conventions and agreements.

The quality of our management of the environment, including land managed by the Department, is a significant factor in our success in exports and tourism.

2.3.3 Atawhai Ruamano

While Government has developed its overall comprehensive statement on the environment (*Environment 2010 strategy. 1995*), the Department is preparing its own ten-year national strategic plan (see *Conservation 2000 - Atawhai ruamano discussion document 1993*). The atawhai ruamano process will provide the vision for Crown-owned natural, historic, and recreational resources for the year 2000 and will focus the Department's efforts. It will outline results areas, goals, and the strategy steps required to achieve the goals.

The conservation results outlined for the year 2000 are:

1. We have made significant gains in protecting New Zealand's indigenous biological diversity and landforms.
2. Important cultural sites have been identified and a significant percentage have formal protection. Places special to Māori are protected and managed according to Māori tikanga in partnership with iwi.
3. We provide a good service to visitors without compromising conservation.
4. New Zealand is an international leader in conservation management and environmental issues, particularly those affecting Asia, the Pacific and Antarctica.

To achieve this overall vision a need for six strategies was identified and the strategies were developed, each with its own vision. These were divided into conservation results (*New Zealand's biodiversity: an overview. 1994; Historic Heritage Strategy. 1995; Visitor Strategy. 1996*); and people changes (*Kaupapa Atawhai Strategy: Atawhai Ruamano Conservation. 1997; Conservation connections: Canterbury Conservancy Public Awareness Strategy. 1995; People Plan. 1994*) to achieve the conservation results.

In conjunction with the Ministry for the Environment, the Department is currently preparing a New Zealand biodiversity strategy. This will provide a national framework, identifying goals, principles and objectives, for the future of New Zealand's biodiversity.

The results of the prepared strategies are incorporated into this CMS to provide the atawhai ruamano vision, and to give the vision more detailed expression in Canterbury.

2.3.4 Legislation

The Conservation Act is central to the Department's mandate. It is "An Act to promote the conservation of New Zealand's natural and historic resources..." and states conservation to mean "...the preservation and protection of natural and historic resources for the purpose of maintaining their intrinsic values, providing for their appreciation and recreational enjoyment by the public, and safeguarding the options of future generations:". The concepts of preservation and protection, natural and historic resources, intrinsic values, providing for the public, and future generations, are together the essence of the Department's work. The same or similar concepts are to be found throughout the various enactments governing the Department as listed in the first and second schedules to the Conservation Act, and as set out within the statutory framework sections of parts 5 and 6 of this CMS.

2.3.5 General Policy

The Department is required to administer this CMS in accord with any general policy approved by the Minister under section 17B of the Conservation Act, and general policy approved by the New Zealand Conservation Authority under section 44 of the National Parks Act 1980.

The following general policies have been approved as at May 1997:

- *General policy for national parks* (National Parks and Reserves Authority, 1983)
- *Wilderness Policy* (Department of Lands and Survey and New Zealand Forest Service, 1983)
- *New Zealand Walkways Policy* (Department of Conservation, 1995)

Departmental guidelines have also been prepared over a range of subjects and have been used in the preparation of this CMS (see the Department's publications in the Bibliography).

2.3.6 National Protocols

The Department shares several areas of interest with other agencies and has, with these agencies, established protocols to clarify responsibilities, roles and processes.

The following protocols have been approved as at January 1998:

- *Protocol between Local Government New Zealand and the Department of Conservation (1996)*
- *Protocol Agreement between the Ministry of Fisheries and the Department of Conservation (1997)*
- *Memorandum of understanding between the Department of Conservation and the New Zealand Fish and Game Council (1996)*

Also proposed is:

- Protocol on the Department of Conservation's interaction with Ngāi Tahu on specified issues, issued by the Minister of Conservation pursuant to the Ngāi Tahu Claims Settlement Act 1998.

2.4 Canterbury

2.4.1 The Landscape

Mainland Canterbury comprises a range of highly distinctive and outstanding landscapes. Culturally the imprint of several waves of human colonisation is evident from Māori-Polynesian migrations from about 1000 AD, and European waves from about 1850.

Each culture has evolved its own set of values for cultural maintenance. These are experienced in terms of physical symbols and icons (for example, buildings) and places of significance where events have occurred or still occur.

The total land area of the Canterbury Conservancy is 4,220,000 hectares of which 16 per cent (769,310 hectares) is managed by the Department. Table 1 summarises Canterbury's situation in a national context.

Canterbury's landscapes include: alpine areas; high country (including inland mountain ranges and intermontane basins); foothills, downlands and hill country; the Canterbury plains (including the Pacific Ocean coast); and Banks Peninsula.

Alpine Landscapes

The Southern Alps/Kā Tiritiri o te Moana form the western boundary to the Canterbury region. These heavily glaciated mountain ranges form a barrier to the moist westerly air flows that result in heavy snow and rain along the main divide.

South of Arthur's Pass, these alpine landscapes are characterised by permanent snow and ice and active glaciers. At slightly lower altitudes and north of Arthur's Pass there is little permanent ice and the area is characterised by extensive screes interspersed with alpine vegetation and bare rock.

The Conservancy manages about 90 per cent of the alpine area. Major modification to these areas occurred from the introductions of domestic stock and wild animals such as deer and thar, and recreation and tourism developments such as tracks and huts.

Aoraki/Mount Cook and a number of other mountains are of great spiritual significance to Ngāi Tahu. In addition, these alpine landscapes tend to be very highly valued for their scenic, recreational, landscape and nature conservation values.

High Country

High country landscapes east of the main divide include inland mountain ranges and intermontane basins. These areas are subject to extremes of weather. Rainfall from the main divide eastward ranges from 13 metres a year to under 500 millimetres in semi-arid areas.

These landscapes demonstrate the influences of past glacial erosion and ongoing erosion by wind and rainfall. Generally, remnant glacial and peri-glacial features, lakes, moraines, and broad deeply incised river valleys characterise the high country.

High country vegetation also reflects past influences – both natural and cultural. In the north, beech forest remnants have survived to recolonise the slopes of the mountain ranges. Tussock grasslands exist above the timberline and in formerly cleared lands at lower altitudes, frequently in association with pastoral farming. Areas of intensive farming predominate on valley floors and parts of the larger basin floors. On predominantly poorer soils and drier areas, especially in the southern basins, plant pests, introduced plants and high rabbit infestations contribute to major problems with land degradation.

Present land tenure, other than conservation lands, is a combination of Crown land pastoral lease, endowment lands and freehold. A process of land tenure review is under way between the Crown and lessees. This process is intended to identify land of high natural, landscape, recreation and historic value that should become land managed by the Department. Other areas with lesser conservation values and more agriculturally productive uses could be freeholded. Significant changes in land use and landscape are likely to result from this process. A similar process is underway between the University of Canterbury and lessees regarding some endowment lands.

High country landscapes are widely represented in art, literature and popular culture. They are also highly valued for the physical features, flora and fauna, their cultural/historic landscape values, scenery and recreational values. They are an important focus for tourism.

Canterbury Foothills, Downlands and Hill Country

Much of middle North, Mid- and South Canterbury is hill country. These landscapes, with their steep to rolling hills, deep river gorges and valley streams, demonstrate the influence of a wetter climate in the past.

The area is subject to severe frosts, some snow and drought. Most areas have been developed by over-sowing and/or top-dressing with fertiliser. Forest and shrubland remnants are found only in the most inaccessible areas or where formally protected.

Today, some of these landscapes are still subject to significant changes through tracking, burning, further developments of marginal land and exotic forestry.

Canterbury Plains

The Canterbury plains form New Zealand's largest outwash plain. It was relatively easy for people to colonise and today retains little indigenous vegetation. Remnants are generally found near estuaries. The Canterbury plains are influenced by the rain shadow effect of their mountain backdrop. With their shallow soil, variable overlay of loess, and predominantly grass cover, the plains are highly vulnerable to drought.

The complex river systems and the coastal areas generally have high natural values. They are also increasingly subject to development pressures.

Banks Peninsula

Banks Peninsula is a volcanically formed island connected to the Canterbury plains by alluvial material. The landscape is dramatic with its steep rock coastal cliffs, towering outcrops and patterns of valleys and ridges.

Banks Peninsula has a distinctive range of microclimates and is the southernmost limit for a number of plant species. Remnants of original vegetation are found throughout the peninsula, especially in valley bottoms, on steep valley sides and in reserves. They range from beech forest to lowland podocarp forest, subalpine tussock and revegetating shrublands. Marine life associated with the peninsula is also rich and diverse.

While land use has retained some natural remnants, the peninsula today is subject to land use change. Exotic forestry is increasing, lifestyle small holdings and diversification are evident, and the increasing pressure of recreational and tourist developments and farming diversification are encroaching further into areas of high natural value. Land use and management practices have also contributed to the degradation of coastal and marine habitats.

2.4.2 Biodiversity

Before human occupation, a large portion of Canterbury was forested. The braided rivers and lakes were pristine. Canterbury's indigenous biodiversity was at its peak with indigenous terrestrial and aquatic life fully adapted to the diverse range of Canterbury habitats, free from exotic pests and predators.

After the arrival of Māori in Te Wai Pounamu, large areas of the plains' vegetation were burnt. This increased the area of savannah woodlands and tussock grasslands. Some terrestrial bird species, such as moa, became extinct during this period.

The arrival of European settlers and western agricultural technology also had a significant impact that resulted in extensive deforestation, drainage and further species extinctions. Only remnants of the indigenous vegetation of the Canterbury plains and Banks Peninsula exist. Plant pests such as gorse, broom, Russell lupin and willow have greatly degraded many natural ecosystems. Rats, mustelids and wasps have had a devastating effect on indigenous invertebrates and birds.

Areas of remnant foothill forests remain, and some are substantial, but their naturalness has been degraded by goats, deer and possums. In the intermontane basins, large areas of remaining tussock grasslands are under stress from the twin impacts of agricultural development, including burning, and the spread of plant and animal pests (such as wilding pines, rabbits and broom). Only in the alpine zone can we find largely natural vegetation communities, although the grazing of exotic herbivores such as sheep, deer, thar, hare and chamois is having an influence.

Wetlands, particularly on the plains, have been greatly reduced in size by drainage. They are often artificially enriched by agricultural fertilisers, leading to eutrophication. The headwaters of most rivers are largely intact. Habitats have been reduced in the lower reaches of braided rivers by damming, irrigation abstraction, and heavy infestations of animal and plant pests. The introduction of trout and salmon has greatly reduced indigenous fisheries. Commercial harvest has greatly reduced eel numbers.

Canterbury has a wide range of ecosystems, which includes mountains, tussock grasslands, beech and podocarp forests, braided rivers, lakes, vast coastal wetlands, inland salt pans, geothermal areas and embayed shorelines supporting both common and threatened species of animals and plants.

Threatened or endangered species are present, most notably:

- black stilt/kāki, the world's most endangered species of wading bird, which is largely reliant on braided riverbeds for suitable habitat
- Canterbury mudfish/kōwaro Canterbury's most endangered indigenous fish, which inhabits slow-flowing streams
- the robust grasshopper, which dwells on Mackenzie basin riverbeds
- Hector's dolphin/upokohue, a rare marine mammal, living and breeding along the Canterbury coast

For most species the best management is habitat protection, which also contributes to ecosystem protection. This is increasingly being considered from a biodiversity perspective. Marine ecosystems are still largely natural in terms of species and community composition, but at greatly reduced biomass levels. No marine reserves or taiāpure exist. Obvious signs of pressure from coastal development, reclamations, pollution and waterfront construction occur in many areas, particularly around Christchurch and Banks Peninsula.

Protected Natural Areas Programme

The goal of the Protected Natural Areas Programme (PNA) is:

'To identify and protect representative examples of the full range of indigenous biological and landscape features in New Zealand, and thus maintain the distinctive New Zealand character of the country' (Kelly and Park, 1986).

The protected natural area programme provides the basic goals, objectives and techniques to protect a representative range of New Zealand natural biodiversity.

Under the PNA programme, New Zealand is broken down into 268 ecological districts, and a field ecological survey assesses the areas that are the best representative examples of each ecosystem. These areas are known as Recommended Areas for Protection (RAPs). Where possible, RAPs should be identified as functioning ecosystems. The implementation phase of the PNA programme involves negotiation with landholders on options for protecting RAPs.

Of the 55 ecological districts in Canterbury, 23 have been surveyed under the PNA programme. A further 13 ecological districts are predominantly comprised of land managed by the Department, particularly adjacent to the main divide. The remaining 19 ecological districts are largely in the North Canterbury and South Canterbury foothills and are priorities for PNA survey (see 5.5.4 Survey and Monitoring and Map 21).

2.4.3 Historic Resources

Māori historic places and Māori archaeological sites (pre-1900) are protected under the Historic Places Act, but some sites are not recorded. Developers and district councils often lack information on the location and cultural sensitivity of these sites. Māori cultural history is generally not well interpreted throughout Canterbury.

Historic resource conservation has been focused by the Historic Places Trust on urban sites, especially notable European buildings and those associated with famous people from the past. Less effort has gone into protecting the buildings and industries associated with ordinary people and everyday lifestyles. Much of the advocacy to protect historic buildings through district plans has been reactive, that is, at the consent stage. The rural industries and features of Canterbury have generally been less of a focus, but local museums and historical societies continue some valuable work in this area.

2.4.4 Recreation

Resource-based recreation is distinguished by abundant resources for mountain, coastal, river and lake activities. Access to these recreation opportunities is readily available. The ease of 'getting away from it all', of having a rural, pastoral backcountry, or remote experience contributes to the high quality of the Canterbury lifestyle.

The Department inherited a network of tracks and huts in the backcountry but has few facilities close to road-ends and urban areas. It is faced with the challenge of maintaining facilities in the interior of the backcountry while providing for the need for facilities and interpretation close to the areas people use most. It will have to direct management into priority facilities.

A variety of ski areas operate under concessions from the Department. A wilderness area opportunity exists in the mid-Southern Alps/Kā Tiritiri o Te Moana.

Recreation facilities located on land managed by the Department include more than 200 kilometres of walks and 800 kilometres of tracks and routes, 15 shelters, 125 huts, 44 bivouacs and 36 camping and picnic areas.

The greatest concentrations of visitors are found close to road-ends and fringe areas of parks. Visitor numbers decrease as the distance from road-end facilities increases. Research indicates that trampers are younger than the average New Zealand age, while fishers and hunters tend to be older than trampers. A trend towards increasing use by older trampers has been recently identified, with more research needed to examine these trends. (Devlin, Corbett and Peebles, 1995)

To meet visitor concentration needs more facilities will be required near urban centres and at road-ends. The effects of the country's ageing population will also need consideration.

Although little active formal co-ordination currently exists between land managers in Canterbury, opportunities exist to rationalise reserve management, particularly on the Port Hills. District councils as well as the Department have to make strategic decisions on their recreation budgets because of resource constraints. Lack of formal public access to the coast, lakes and rivers is an issue. In other areas, such as riverbeds, intermontane lakes, coastal estuaries, and parts of the Banks Peninsula coast, in the breeding season wildlife needs to be protected from human disturbance.

2.4.5 Conservation Support

There is a strong community desire to support conservation projects, but opportunities for involvement with conservation projects are generally limited. The Conservancy supports campaigns, runs summer volunteer holiday programmes, and offers some individual volunteer opportunities at larger area offices. However, an improvement is needed in the relationships with Ngāi Tahu and high country runholders.

An ongoing joint Tū Kakariki wetland restoration project with Te Ngāi Tuahuriri rūnanga and a major sponsor has been established. The Conservancy needs to work more with community groups, volunteers, individuals and public agencies (such as local authorities and other Government departments) to clarify respective roles and develop partnerships and productive working relationships. Scope exists for further sponsorship of projects.

Table 1: Canterbury Conservancy in a National Context¹

<i>Feature</i>	<i>Canterbury Number</i>	<i>Approximate % of National Total</i>
Human Population	442000	15
Ecological Districts	54	20
Water Conservation Orders	3	25
Threatened Bird Species ²	18	25
Threatened Marine Mammal Species	2	100
Threatened Freshwater Fish Species	6	60
Threatened Invertebrate Species	70	10
Threatened Plant Species	70	20
Animal Pest Species	16	60
Fire Risk	Fire danger in summer	Potential for extreme conditions
World Heritage Areas	Part of 1	Part of 50
National Parks	2	15
Conservation Parks	3	15
National Reserves	1	35
Marine Mammal Sanctuary	1	50
Huts ³	170	15
Tracks ⁴	200	5
Visitors ⁵	900000	20

¹ See also Volume 2, Table 1

² 'Threatened' includes category A, B and C species as listed in *Setting priorities for the conservation of New Zealand's threatened plants and animals*. Molloy, Davis and Tisdall, 1994

³ Based on 1000 huts nationwide

⁴ Based on each conservancy having approximately 200 tracks each

⁵ Based on 5 million visitors to land administered by the Department per year as a best estimate

2.5 A Kaupapa/Philosophy for Canterbury

The aim of this section is to develop a common purpose for conservation matters in Canterbury that can be shared by all agencies and individuals operating in the region, including the Department of Conservation. The vision and goals have not yet been discussed with all these agencies and individuals other than through the draft CMS submission process, and are presented here for further discussion.

The future for Canterbury's natural, historic and recreational resources will be shaped by the actions of many players, including administrative agencies, landholders and individuals willing to put in their own time and effort. Because of the variety of potential players, and the lack of any overall co-ordinating structures, there is a need to develop an overall vision for conservation in Canterbury.

The vision and goals below have been developed by the former Aoraki and North Canterbury conservation boards and refined following public submissions.

2.5.1 A Canterbury Vision

Hei whakamanawa herenga tahi kia whakangungua o te rohe Katapere taonga Māori, taonga kōrero, tikanga hoki, me te atawhai i ngā hākinakina me te whakaaro mahi tūruhi.

To encourage a shared commitment to protecting Canterbury's indigenous natural, cultural and historic resources, while fostering compatible recreation and allowing appropriate tourist use.

The vision has a number of themes:

- to achieve conservation outcomes we all have to act to make it happen; talking about it or wishing it so will not be enough
- when we are all involved in conservation, we all gain a greater understanding and appreciation of our natural historical and cultural surroundings; hence a far better conservation and social result
- retaining and enhancing Canterbury's indigenous biodiversity will contribute to national and international obligations
- protecting indigenous plants and animals and their habitats has to be a cornerstone of conservation; many species have adapted to Canterbury environments, while some are found nowhere else: conserving indigenous species has to take priority over protecting introduced species
- the combination of Canterbury's natural habitats, ecosystems and landscapes, together with its plants and animals, is unique to the region: these elements are the region's natural heritage; once gone, they are gone forever
- the use of this environment has resulted in a cultural heritage of landscapes, historical features and usage patterns which also cannot be duplicated
- Canterbury's natural areas provide inspiration and an opportunity to meet nature on its own terms

2.5.2 Canterbury Goals

Conservation Partnership

To encourage community awareness of, involvement in, and shared responsibility for heritage conservation in Canterbury.

Conservation is everyone's concern – young and old, rural and urban dweller, local and visitor. The individual actions that each of us take build up into the collective forces that shape our environment. It is not enough to leave the future of conservation in Canterbury in the hands of community groups, and local and central government. Instead, each one of us has to take responsibility for what we would like to see handed on to future generations. We are the guardians of the past, present and future, working to achieve a conservation vision which is consistent with our international obligations, the Treaty of Waitangi and national legislation; and to which we all can contribute.

Heritage

To identify, protect and enhance Canterbury's:

- indigenous ecosystems, processes and species
- natural landscapes, natural landscape values, geological features and landforms
- historic and cultural heritage

In Canterbury many species and ecosystems are threatened or poorly protected. Many habitats have been reduced in size, while others are subject to attack by animal and plant pests and other threats. So while we can cherish what we have, we must also acknowledge that there is considerable room for improvement. The answer will lie in holding on to and improving what we still have, so that the distinctive character of Canterbury is maintained.

Outdoor Recreation

To foster patterns of outdoor recreation that are ecologically and socially sustainable while avoiding, remedying or mitigating adverse effects on Canterbury's natural, cultural and historic heritage.

Being able to visit and enjoy the distinctive heritage features of Canterbury provides us all with recreational benefits, benefits that we take back into the rest of our lives. These visits must not, however, destroy or damage the enjoyment of the next visitor or impact adversely on the natural environment. Recreation enjoyment provides an opportunity to increase our understanding of, sensitivity towards and support for the natural world, as well as time to develop powers of observation, outdoor skills and self-reliance.

2.5.3 Canterbury in the Year 2005

Canterbury's natural and historic resources have been changed dramatically by human intervention and continue to change through the effects of our activities and the impacts of introduced species. Slowing and arresting the rate of change will be an important result in its own right. There has to be some progress and improvement on the existing situation.

We also need to lift our sights higher than that. Canterbury's natural and historic resources are much reduced. Some improvement on existing conditions has to be a part of the vision for the task we set ourselves.

The North Canterbury/Aoraki Conservation Board would like to see the following achieved and happening by the year 2005.

In the Year 2005...

People Partnership

- There is wide public and community support in Canterbury for conserving the region's natural, cultural and historic heritage: for its indigenous natural values, to provide recreation opportunities, and as a character backdrop for the region's economic activities.
- Landholders have a good understanding of the heritage values under their management control, and have ready and continuing access to information about those features and their management needs.
- Ngā tūpuna maunga and associated wāhi tapu are identified, recognised and protected.
- Cultural connections of Ngāi Tahu to places within Canterbury through whakapapa, wairua and mana whenua are fully recognised.
- Traditional relationships of Māori to waters are recognised and promoted.
- The relationship of Māori to the natural world is reflected in the overall vision.
- Partnership opportunities with iwi, rūnanga and whānau are fully integrated into management processes.
- There is a range of opportunities for the community, individuals and industry to become voluntarily involved in conservation maintenance and improvement projects.
- Individuals and organisations are actively engaged in advocating for the protection of Canterbury's natural and historic heritage, and regulatory agencies are responsive to those views.
- Organisations and individuals who have a concern for Canterbury's natural and historic resources or a significant role in managing the environment are consulted and co-operated with in a way that increasingly reflects common goals and a conservation ethic.

Heritage Conservation

- No further species of indigenous plants or animals have become extinct.
- Threatened plant, bird, fish and marine mammal populations are well on the way to recovery to self-sustaining levels, and comprehensive action is underway to protect threatened invertebrate and reptile populations.
- The prime examples of the full range of representative ecosystems in Canterbury have been accorded some form of formal protection and active management; with special emphasis on the protection of:
 - podocarp forest
 - coastal, hardwood and seral bush
 - savannah, mānuka and kānuka woodland
 - snow, red, silver and fescue tussock, and blue wheat grass
 - grassland
 - dunelands
 - freshwater and saline wetlands, including lakes
 - mudflats
 - estuaries
 - marine fish nursery areas
 - freshwater fish spawning area
 - natural riparian margins for all water bodiesso that a comprehensive regional system of protected natural areas is in place
- Other areas of Canterbury's natural heritage, while not necessarily subject to a formal protection mechanism, are sufficiently valued by their owners that they are receiving some form of conservation management.
- Public agencies are setting an example by controlling the animal and plant pests on lands for which they are responsible, to the extent that those pests are not endangering the sustainability of the indigenous ecosystems.
- Publicly, resources are targeted most effectively for the benefit of indigenous heritage conservation.
- Conservation protection has extended to include the Ashburton Lakes and the Upper Hurunui; and all waterways and wetlands contain sufficient flows or water levels to sustain their fish, bird and plant populations throughout the year.
- The marine environment is afforded similar ecosystem protection and sustainable use as applies to the land environment.

- Prime examples of landscapes are protected, such as representative passes, tussock grasslands and Banks Peninsula landscapes, braided riverbeds.
- Historic features, both Māori and European, are as valued and protected as Canterbury's natural heritage.
- There is demonstrable progress in the restoration of important but degraded environments such as Te Waihora/Lake Ellesmere, the Ōpihi river, dryland short tussock grasslands, and savannah grassland.
- A wide cross-section of representative places were identified early on in the ten-year period and used as benchmarks to measure the progress (or otherwise) of Canterbury conservation.

Recreation/Use of Areas Protected for Conservation Purposes

- A wide (but not necessarily the full) range of recreation opportunities is catered for on public lands protected for conservation purposes; these opportunities are geared to providing visitor enjoyment without damaging or degrading the very features and qualities that the visitors come to experience; they are provided by the Department or concessionaires.
- The Department has maintained the remote wilderness character of the upper catchments of the Rangitata and Rakaia rivers.
- Ngāi Tahu historical and cultural links with certain localities are recognised and provided for, and as a result the experience of all visitors to these localities is enriched.
- Landholders derive a sense of satisfaction from sharing with others the natural and historic heritage they are responsible for, under conditions set by them.
- Voluntary and community support is encouraged for recreational development on public lands.

2.5.4 How Can This Be Achieved by 2005?

Achieving the conservation vision for Canterbury over the next ten years will require the imaginative use of the various mechanisms and documents that various organisations work with. These include:

- the Resource Management Act: regional policy statements, regional plans and district plans
- this Conservation Management Strategy, conservation management plans and subordinate functional strategies and other plans
- pest management strategies (prepared under the Biosecurity Act)
- annual business plans of central government departments and local government
- pastoral lease and other tenure reviews

For individual landholders, schools, recreation groups etc., achieving the vision will come after widespread appreciation of the connection of conservation with their daily lives has been developed. This is why this statement places so much emphasis on the people-partnership aspect of the vision.

The envisaged future will only be possible with the support of the agencies and groups listed in Table 2.

Table 2: Canterbury Conservation Partners and Associates and Their Roles

Group	Level	Role
Department of Conservation	National Regional Local	Crown conservation management and advocacy
Te Rūnanga o Ngāi Tahu and Papatipu Rūnanga	Regional Local	Mana whenua
Conservation Board: Canterbury/ Aoraki	Regional Local	Conservation policy advice to Department of Conservation Advocacy to public
Ministry for the Environment	National Regional	Promotion of the sustainable management of the environment
Ministry of Agriculture	National Regional	Sustainable land management
Ministry of Fisheries Eel Management Groups	National Regional	The management and conservation of fisheries and fishery resources
Ministry of Forestry	National Regional	To facilitate the optimal contribution from forestry and forestry products to New Zealand's sustainable development and economic growth.
Queen Elizabeth II National Trust	Regional National	Independent conservation agency
Fish and Game Councils	Regional National	Fish and game management and habitat protection
Historic Places Trust New Zealand Archaeological Association	National Regional	Historic conservation and advocacy Cultural heritage advocacy
Forest Heritage Fund and Ngā Whenua Rāhui committees	National	Funding of land and natural resource protection
Landcare Research/National Institute of Water and Atmosphere/Universities	National	Science and research
Knight Frank New Zealand Ltd	National Regional	Pastoral lease administration for the Minister of Lands
Transport authorities (e.g. Transit New Zealand)	National Regional Local	Environmental impact mitigation, planning design/management, roadside facilities and signs, landscape enhancement
Canterbury Regional Council	Regional Local	Integrated and sustainable management of natural and physical resources of Canterbury
District councils	Local	Sustainable land use and subdivision management, reserve management, landscape protection, riparian access and protection

continued overleaf...

Table 2: Canterbury Conservation Partners and Associates and Their Roles continued

Conservation and local interest groups: (e.g. Forest and Bird, residents' associations, Christchurch/Ōtautahi Agenda 21 Society, Greenpeace, WWF, Summit Road Society, Friends of Banks Peninsula, covenantors, Arthur's Pass Association Inc, Canterbury Botanical Society)	National Regional Local	Conservation advocates/education/ volunteers/conservation managers
Federated Mountain Club, tramping clubs, climbing groups, New Zealand Deerstalkers' Association, dive clubs, boating clubs, 4WD clubs, ski clubs, New Zealand Motor Caravan Association	National Regional	Recreational opportunities, facilities/safety/ education/volunteers
Land management and land use organisations e.g. landcare groups, Federated Farmers, farmers, farm foresters, forestry companies	National Regional Local	Farming, land and water use sustainability, advocacy and education, cross-boundary issues Mitigation of impacts
Canterbury Environment Centre	Local	Conservation information/network
Volunteer organisations (e.g. High country fire teams, Animal Hospital Ferry Road, Marine Watch honorary rangers)	Regional Local	Assistance with Department functions
Department concessionaires	National Regional Local	Conservation and environment education, mitigation of impacts
Private enterprise	National Regional Local	Conservation sponsor Mitigation of impacts, advocacy capital investment, recreational opportunities, facilities, safety, education
Service clubs, e.g. Lions, Rotary, Zonta, Kiwanis	National Regional	Conservation sponsorship, volunteer assistance, education
Educational institutions e.g. universities, polytechs, schools	Regional	Conservation and environmental education and research
Fishing groups, e.g. Canterbury Marine Recreational Fishers	Regional Local	Promotion and maintenance of fishing opportunities
Professional associations e.g. landscape architects, agricultural scientists and engineers	Regional	Landscape and open space advocates, conservation of the built environment

3. CMS Goals and Priorities

3.1 Conservancy Management Goals

The Conservancy is the leading Crown agency devoted to conservation management and advocacy in Canterbury, but the job of conservation is too large and too important for one organisation alone. The Conservancy must use its Crown funding and apply good scientific and management practices to maximise the conservation benefits that are achievable in the ten-year time frame of this CMS. Other organisations and individuals can, and will, contribute. Some difficult choices and clear conservation priorities must be made to optimise what can be achieved.

The following goals will guide the Department's management and advocacy in Canterbury over the next ten years. They are termed Conservancy Management Goals to distinguish them from the wider Canterbury Goals (see 2.5.2), which are not specific to any organisation.

3.1.1 Heritage

- To manage areas, natural resources and protected species under the Conservancy's guardianship for their contribution to indigenous biodiversity conservation.

The Conservancy is responsible for about 1350 units of land, the protection of important natural resources and protected species generally. It is necessary to prioritise management to maximise the benefits for nature conservation, using biodiversity criteria. This will involve the restoration and rehabilitation of threatened indigenous ecosystems, communities and species. Some areas will be managed with a historic or recreational focus, depending on their values and underlying land status. (These are described individually in Volume II).

- To identify and work towards adequate representation of the indigenous biodiversity of Canterbury in the protected natural area system.

The natural or intrinsic values of many areas are not adequately protected in Canterbury. To meet the goal of protecting a more representative range of Canterbury's indigenous biodiversity, it is necessary to identify these areas, using ecological and biogeographic principles and, where agreed, to seek their formal protection. This will include linking with existing protected areas or avoiding, remedying or mitigating any adverse effects from adjacent land on protected areas.

Practical conservation work and advocacy projects, such as fencing, and animal and plant pest control are essential to retain indigenous biodiversity in Canterbury. The Conservancy will identify the land, freshwater, and marine ecosystems in Canterbury, outline their representativeness to Canterbury's natural area system, develop guidelines for protection priorities, and seek to protect species and areas that are threatened and under-represented.

- To target threat control to sustain indigenous biodiversity in Canterbury into areas where significant natural resources are at risk and achievable management objectives can be met, using the most effective and efficient methods.

Much of the land managed by the Department is at risk from a variety of threats including plant and animal pests, wild animals and fire. It is therefore necessary to prioritise and identify indigenous ecosystems and set achievable protection objectives that optimise biodiversity outcomes. Particular attention will be paid to pre-emptive action to prevent further threats from developing and to integrate control across a range of threats. Animal and plant pests, and wild animals will be controlled to the level necessary to achieve intended outcomes (unless it is possible to achieve extermination), within the resources available to the Conservancy.

- To identify, protect and enhance a representative range of Canterbury's cultural and historic heritage with a focus on land managed by the Department.

Since the discovery of Aotearoa, successive waves of Waitaha, Ngāti Mamoe, Ngāi Tahu, French and British settlers have arrived in Canterbury, leaving their cultural imprints. It is important that these features are protected so that future generations know of their history, lifestyle, cultural artifacts and legends. The Conservancy will seek to ensure that a representative range of these features is adequately protected. The Conservancy will focus management on areas managed by the Department. The New Zealand Historic Places Trust is expected to target its work towards the protection of historic resources on private land.

- To identify, prioritise and contribute to the protection of a representative range of Canterbury's geological features and landforms.

A range of geological features and landforms needs to be recognised, and protected where appropriate. The New Zealand geopreservation inventory (see Kenny and Hayward, 1993) provides the basis for landform and geological conservation. Many geological features are protected as part of the land managed by the Conservancy. On other areas, the Conservancy will provide information to district councils and will advocate for the protection of vulnerable geological features.

- To identify, prioritise and contribute to the protection of Canterbury's distinctive landscapes and heritage landscape values.

Canterbury's landscape reflects the interaction between natural processes and human-induced changes and attitudes. Canterbury's landscape is very distinct in the New Zealand context. A large proportion of the alpine landscape is protected on land managed by the Department. Together, landforms such as the Southern Alps/Kā Tiritiri o te Moana, Banks Peninsula, the Canterbury plains, the high country, braided rivers and coastal lagoons are central to the identity and sense of place of Canterbury. These landforms are central features in Ngāi Tahu creation stories of Te Wai Pounamu, the South Island. The Conservancy will work with landholders and local government to identify and assess significant landscapes in Canterbury, with a focus on protecting those landscapes and their values that contribute significantly to indigenous biodiversity and geopreservation.

3.1.2 Treaty Of Waitangi

- To develop and maintain a co-operative working relationship with Ngāi Tahu to give effect to the principles of the Treaty of Waitangi.

The essential elements of the principles of the Treaty of Waitangi have been evolving through case law in the courts. At present they can be summarised as:

- the essential bargain
- partnership
- duty to be informed
- active protection
- avoid prejudicial actions

Ngāi Tahu is the Crown's Treaty partner with respect to Canterbury. Giving effect to the Treaty requires both parties to act reasonably and in good faith towards each other. The Department, as a Crown agency, is required to actively protect Ngāi Tahu Treaty rights. To do this in Canterbury, a joint ongoing programme with Te Rūnanga o Ngāi Tahu Papatipu Rūnanga is to be established, where agreed, to document traditional knowledge and management practices and related tikanga across all areas managed by the Department. The Conservancy will work with Ngāi Tahu at Te Rūnanga and Papatipu Rūnanga level to implement the Ngāi Tahu Deed of Settlement and the Ngāi Tahu Claims Settlement Act 1998 and to achieve long-term goals on matters of significance to them, such as:

- resource protection
- habitat maintenance and enhancement
- traditional fisheries
- other mahinga kai
- wāhi tapu and other taonga
- tikanga (customary use, management and interpretation)

3.1.3 Working With Others

- To develop and facilitate a shared conservation commitment between the Conservancy and the wider community through consultation and education

The Department can play an important role in furthering the wider appreciation and understanding of conservation in Canterbury. The Conservancy will undertake to raise awareness by maximising educational opportunities through publications, interpretation panels, educational training, talks, displays, visitor programmes and general public relations. The Conservancy will work with papatipu rūnanga to develop joint interpretive and educational programmes. A high public awareness of issues and the boards' and the

Department's role will be achieved by effective communication and the integration of advocacy and management work.

- To encourage the community to share in the active guardianship of areas and resources entrusted to the care of the Conservancy and others.

Conservation is a personal and community responsibility. While the Department is the responsible Crown agency and is expected to demonstrate clear leadership, it cannot succeed without the support of other individuals and organisations. The Department will endeavour to be a good neighbour where practicable. A shared approach on both public and private land between the Department; Ngāi Tahu; conservation boards; regional, district and fish and game councils; landholders and land managers; private enterprise; and conservation, recreation and community groups will produce the maximum efforts. Conservancy volunteer programmes, liaison with conservation groups, and community restoration projects will foster this partnership.

- To consult and co-operate with organisations and individuals who have a significant role in managing natural, historic and recreation resources to foster conservation in Canterbury.

The Department needs to liaise and co-operate closely with organisations and individuals who have either a role or a significant interest in the management of Canterbury's natural, historic and recreation resources. The involvement and commitment of these organisations and individuals is critical to the development of conservation in Canterbury and will recognise, appreciate, sustain and enhance Canterbury's natural, historic and recreation resources.

3.1.4 Recreational Opportunities

Consistent with the understanding, enjoyment and protection of Canterbury's natural and historic heritage:

- To encourage and assist in the provision of a range of appropriate recreational opportunities on land managed by the Department.

Many of the Conservancy's outdoor recreation activities such as tramping, hunting and fishing are in the backcountry. Others such as picnicking, skiing and short walks are easily accessible by vehicle, and are on the fringes of the backcountry. Fewer opportunities are found close to urban centres. This imbalance needs to be redressed, with a focus being on front country areas.

- To make provision for a range of recreational facilities and services to be provided by the Department, recreational groups and concessionaires, appropriate to the recreational level of use, recreational importance and adverse effects.

Maintenance of tracks, huts and other recreation facilities will be prioritised according to their use levels, recreational importance and safety benefits. This will achieve a more equitable and efficient use of the limited recreational budget. The vicinity of road-end car parks where a significant recreation demand occurs will be a priority for recreation development. Other groups will be encouraged to assist in maintaining facilities of lower use.

Commercial recreation can offer opportunities for people to take part in activities in which they would not normally participate (such as marine mammal watching, guided climbing and fishing). Demand for commercial opportunities is steadily increasing. Commercial recreation has the particular ability to generate both significant educational and awareness opportunities and income, but must be managed at a level that does not compromise nature conservation values and does not diminish the enjoyment of other users. The educational and public awareness opportunities provided by concessionaires will be fostered.

The Conservancy will monitor concessions and enforce conditions.

- To promote the protection of sports fisheries and freshwater habitats when consistent with indigenous fish conservation.

The Department will liaise with fish and game councils, Papitipu Rūnanga, regional and district councils and the community to advocate for water quality, riparian protection and minimum flows that maintain and enhance fisheries habitats.

3.1.5 Non-Recreational Uses

- To allow and manage appropriate commercial and community uses, compatible with the protection of natural and historic values.

A range of commercial and community uses can be accommodated on land managed by the Department, provided they are compatible with the protection of the natural and historic resources for which those lands were set aside. For example, easements to neighbouring properties, beehives, and broadcasting and telecommunication facilities. The onus will be on applicants to demonstrate that any adverse effects can be avoided, remedied or mitigated, and that the structures or activities cannot be accommodated elsewhere. Consultation will be undertaken with affected parties, Papatipu Rūnanga, interested groups and the general public, according to the nature of use applications. Environmental impact assessments will also be required for all significant developments, including all statutory consents. The Conservancy will monitor concessions and enforce conditions.

3.1.6 Management Style

- To set and maintain high-quality standards for the Conservancy's management of its responsibilities and dealings with the community.

The Conservancy will develop programmes and procedures that seek to consistently result in effective and efficient management and advocacy, such as:

- regular public participation opportunities
- regular meetings with key associate groups
- prompt and accurate responses to public and board inquiries
- efficient, effective and accountable use of Crown and other funding
- motivated, healthy and satisfied staff
- corporate services that effectively support conservation outcomes
- conservation training for staff including:
 - public awareness
 - project management
 - mountain, marine and backcountry skills
 - consultation
 - staff management
 - ecology, history, culture, landscape, recreation expertise
- Ngāi Tahu settlement implementation

The Conservancy recognises that it has to set an example for the rest of the community in the quality of management, both to gain community acceptance for its work and to make the best use, in the interest of conservation, of the scarce resources at its disposal. This approach is the foundation of a successful partnership in the Canterbury community.

The Department is in the process of introducing Quality Conservation Management (QCM) procedures and systems for all its operations, based on quality management systems to ensure best practice for safety management, quality assurance and effective output delivery across all its functions.

The major components of a quality management philosophy are:

- a nationally consistent quality system at all levels in the Department
- identification and allocation of management accountability
- document control and recording systems
- consistent quality records
- management review and feedback loops
- training
- audit
- corrective action

A Quality Conservation Management system has the following four elements:

- Objectives: for managing quality and risk in operations
- Accountabilities: who must undertake actions and be accountable for them
- Procedures: to be followed in carrying out objectives and accountabilities
- Standards: to ensure consistency throughout the Department

By developing QCM systems the Department will ensure it meets the statutory requirements for all its operations within an environment of continuous improvement.

The principle objective of the Health and Safety in Employment Act (1992) is to prevent harm to employees while at work. The Department's general duty is to identify hazards and:

- where practicable, the hazard must be eliminated
- if elimination is not practicable, the hazard must be isolated
- if it is not practicable to eliminate or isolate the hazard completely, then the hazard must be minimised.

The aim of Conservancy management is to provide an excellent conservation management and advocacy service to the public. The Conservancy will seek to continually improve its performance, both by making more efficient use of resources (staff, finance, infrastructure) and by working with its neighbours, local authorities, visitors and conservation/recreational supporters.

3.2 Key Priorities

Consistent with 2.5.2 Canterbury Goals and 3.1 Conservancy Management Goals, the Department has prepared objectives and implementation statements for Places (Section 4) and Activities (Section 5) in the Conservancy.

Within each activity section, key priorities have been identified in accordance with the implementation statements. These priorities are to be put into effect in a number of places and are summarised in table form at the end of each place and activity section.

Key priorities, therefore, are both conservancy-wide priorities and priorities for the management of the particular place issues.

Table 3 is a summary of the known key activities the Conservancy intends to undertake and where they will be implemented. Most of the priority actions will be initiated within the first five years of the CMS implementation. Because of changing political and financial imperatives, not all priorities for the next ten years can be anticipated. The boards and the Department will in due course have to consider additional major activities or changed activities over the next ten years in addition to those identified in Table 3. This table illustrates the known stepping stones the Department needs to set in place to realise the improved conservation vision for the year 2005.

TABLE 3: KEY PRIORITIES BY PLACE

5.1 People Partnership

Key Result Areas	All Places	Hurunui	Lowry	Banks Peninsula	Puketeraki	Plains	Waimakariri	Rangitata	Pareora	Waitaki
5.1.2 Treaty Partnership	1. Assist implementation of Ngāi Tahu Claim Settlement Act 2. Develop cultural database 3. Regular consultation 4. Respect Ngāi Tahu tikanga		Weka Pass rock drawing protection	1. Ripapa Island management and restoration 2. Give effect to Ripapa Topuni. 3. Marine reserves and sanctuary consultation 4. Quail Island restoration		Te Waihora, Kaitorete Spit, Wainono Lagoon protection and enhancement	1 Kura Tāwhiti Conservation Area management 2 Give effect to Kura Tāwhiti Tōpuni		Rock drawing protection	Give effect to Aoraki/Mt Cook Topuni
5.1.3 Community Participation	1. High country fire team 2. Honorary rangers	Wilding tree control	Marine Watch	1 Quail Island restoration 2 Marine Watch		1 Ōtūkaikino wetland restoration (Wilson's Swamp) 2 Marine Watch	Wilding tree control	Peel Forest landscape protection		Wilding tree control
5.1.4 Communication and Liaison	1. Landholder liaison 2. Regional and district council liaison 3. School resource materials 4. Campaigns/ events 5. Liaison with associates 6. RMA advocacy	Support Hurunui WCO application	Marine reserve consultation and advice	1. Marine mammal sanctuary consultation 2. Marine reserve consultation 3. Marine Watch volunteers	Torlesse/foothills conservation parks proposal	1. Motukarara nursery open day 2. Regular NGO liaison meetings in Christchurch and Timaru 3. Marine Watch volunteers		1. Hakatere ecological district wetlands WCO application 2. Investigate and protect proposed Adams wilderness area 3. Upper Rangitata-Rakaia conservation park investigation 4. Mount Somers area conservation		1. Project River Recovery 2. Ōhau, Hawkdun-Oteake conservation park investigations 3. Aoraki/Mt Cook management plan review 4. SWNZWHA management
5.2 Heritage Conservation										
5.2.2 Landscape	1. Conservancy regard 2. Community awareness 3. Liaison 4. RMA advocacy	1. Tenure review 2. SH7 scenic corridor	1. Tenure review 2. Coast, gorges and limestone features	1. Maintain Banks Peninsula landscape integrity 2. Maintain coastal natural character	Tenure review		1. Tenure review 2. Waimakariri basin landscape 3. Lakes and wetlands 4. SH73 corridor 5. Wilding tree control	Tenure review Ashburton lakes protection	Tenure review	1. Tenure review 2. Aoraki/Mount Cook Village redevelopment 3. High country landscape protection
5.2.3 Land Ecosystems	1. Landholder liaison 2. Information provision 3. RMA advocacy 4. Recording and protection of significant indigenous biodiversity 5. Protection of significant geo-preservation sites 6. Fencing 7. Reserves/ covenants etc 8. Restoration of significant sites	1. Ecological survey 2. Tenure review 3. Mainland island restoration programme	Ecological survey	1. Ecosystem protection and survey implementation 2. Quail Island restoration project	1. Ecological survey 2. Tenure review	Kaitorete Spit dunes and invertebrates	1. Ecological survey 2. Tenure review 3. Threatened skinks, birds, kōkopu and plants	1. Ecological survey 2. Tenure review	1. Ecological survey 2. Tenure review	1. Ecological survey 2. Tenure review

Key Result Areas	All Places	Hurunui	Lowry	Banks Peninsula	Puketeraki	Plains	Waimakariri	Rangitata	Pareora	Waitaki
5.2 Heritage Conservation (continued)										
5.2.4 Freshwater Ecosystems	1. Landholder and agency liaison 2. RMA advocacy 3. Fish passage regulations 4. Indigenous fish management plans 5. Riparian protection	1. Support the investigation and application for a WCO on the Upper Hurunui River 2. Tenure review 3. Seek kōkopu habitat protection			Tenure review	1. Protection and enhancement of Te Waihora/Lake Ellesmere and other lagoons and estuaries 2. Investigate IUCN wetland of international importance status for Te Waihora/Lake Ellesmere 3. Canterbury mudfish surveys and protection	1. Waimakariri, Coleridge and Ryton catchments wetland protection 2. Tenure review	1. Investigate application for WCO over the Hakatere ecological district wetlands 2. Tenure review	Tenure review	1. Project River Recovery 2. Investigate Lake Ōhau Water Conservation Order 3. Tenure Review
5.2.5 Marine Ecosystems	1. Marine mammal management 2. Marine survey 3. Marine ecosystem conservation advocacy 4. Oil spill planning and response	N/A	1. Advice on marine reserve investigations 2. Motunau Island management	1. Marine mammal sanctuary maintenance and review 2. Advice on marine reserve investigations	N/A	Support IUCN wetland of international importance status for the Estuary of the Heathcote and Avon Rivers/Ihutai	N/A	N/A	N/A	N/A
5.2.6 Indigenous Species	1. Preservation and protection of category A and B species 2. Promotion of indigenous species conservation work and habitat protection	Threatened skinks, forest birds, plants, kōkopu	White flippered penguin, threatened plants	Hector's dolphin, threatened plants, bird and invertebrates	Great spotted kiwi	Canterbury mudfish, wrybill and black-fronted tern, long-tailed bat and threatened plants	Threatened skinks, birds, kōkopu and plants	Threatened skinks, weta, long-tailed bat, birds, kōkopu and plants	Long-tailed bat	Threatened skinks, robust grasshopper, birds (notably braided river species), kōkopu, plants
5.2.7 Historic Resources	1. Protection of significant historic resources 2. Respect for Ngāi Tahu cultural values	Tenure review	Weka Pass Historic Reserve rock drawings protection	Protection and restoration of , Quarantine Barracks (Quail Island), Ripapa Island	Tenure review		1. Tenure review 2. Castle Hill/Kura Tāwhiti rock sites	1. Staveley lime kilns 2. Tenure review	1. Rock drawings 2. Tenure review	Tenure review
5.2.8 Animal Pests and Wild Animals	1. Statutory control 2. Control to protect indigenous biodiversity (e.g. see places)	1. Stoats 2. Lake Sumner RHA management and monitoring		Possum, goat control	Oxford RHA management and monitoring		Stoats (Arthur's Pass National Park)	Thar	Wallaby control	Thar, rabbit, mustelids and cats
5.2.9 Weed Pests and Exotic Plants	1. Statutory control 2. Control to protect indigenous biodiversity (e.g. see places)	1. Broom and wilding tree control. 2. Volunteer and community participation	Boxthorn (Motunau Island)	old man's beard		Marram grass (Kaitorete Spit)	Wilding trees, exotic tree plots (Craigieburn)	Spanish heath, old man's beard		Wilding trees, Russell lupin, willow brushweed
5.2.10 Fire Management	1. Fire dynamics research 2. Improved fire response capability	Ecological effects of high country burning			Ecological effects of high country burning		Ecological effects of high country burning	Ecological effects of high country burning		Ecological effects of high country burning

Key Result Areas	All Places	Hurunui	Lowry	Banks Peninsula	Puketeraki	Plains	Waimakariri	Rangitata	Pareora	Waitaki
5.3 Visitor Services										
5.3.2 Recreation Opportunities	1. Facilitate and improve recreational access 2. Walkway gazettals 3. Signs/ Interpretation 4. Information provision 5. RMA advocacy	1. Loch Katrine management plan and road access 2. Aircraft access control		1. Recreational access to the coast and hills 2. Support a Little River- Motukarara trail	1. Mountainbike tracks 2. Oxford RHA	Support new walkways near Christchurch and Timaru	Revoke Ōtehake wilderness area status	Investigate an Adams wilderness area		Godley Valley remote values.
5.3.3 Recreation Facilities	1. Hut fee compliance 2. Maintain priority facilities 3. Signs upgrade 4. Maintain a recreation strategy 5. Community involvement 6. Rationalise low priority facilities 7. Statutory approvals	1. Upgrade some facilities (Lewis Pass National Scenic Reserve and St James Walkway) 2. Loch Katrine management plan			1. Upgrade some facilities Oxford Conservation Area and Mount Thomas Forest 2. Improve access		1. Upgrade some facilities in Arthur's Pass National Park, Craigieburn Conservation Park and adjacent areas 2. SH73 roadside facility upgrade	1. Maintain and upgrade Mount Somers Walkway 2. Peel Forest Park facilities		1. Upgrade Aoraki/Mount Cook village 2. Upgrade Aoraki/Mount Cook campground 3. Upgrade Aoraki/Mount Cook and Ōhau Forest road-end facilities
5.3.4 Visitor Impacts and Safety	1. Safety information 2. Avoidance of adverse effects of visitor activities 3. Visitor impact monitoring 4. Facility management	Mountainbike management 1.		Mountainbike management	Mountainbike management		1. Protect Castle Hill basin limestone formations from adverse effects of rock climbing 2. Mountain bike management			Mitigate adverse effects of aircraft noise on visitor satisfaction
5.3.5 Visitor Centres; and 5.3.6 Interpretation	1. Visitor centre assessment 2. Interpretation by concessionaires 3. Prepare interpretation strategy 4. Support Canterbury Tourism Council	1. SH7 scenic corridor conservation values interpretation 2. Address kea management issues					1. SH 73 interpretation 2. Ngāi Tahu interpretation 3. Arthur's Pass Visitor Centre and village area interpretation	Mount Hutt ski field conservation values interpretation		1. Aoraki/Mount Cook visitor centre development 2. SH8 and 80interpretation 3. Ngāi Tahu interpretation 4. Aoraki/Mount Cook village area interpretation
5.4 Concessions and Other Uses										
5.4.2 General Concessions	1. Avoid, remedy and mitigate adverse effects. 2. User-pays monitoring 3. Ensure adequate environmental assessment 4. Rents, fees, royalties and cost recovery									
5.4.2.1 Public Works	See 5.4.2						Arthur's Pass/SH73 roading * approvals * management * restoration			

Key Result Areas	All Places	Hurunui	Lowry	Banks Peninsula	Puketeraki	Plains	Waimakariri	Rangitata	Pareora	Waitaki
5.4 Concessions and Other Uses (continued)										
5.4.2.2 Easements	See 5.4.2									
5.4.2.3 Grazing	Wetlands protected from uncontrolled and excess grazing					Te Waihora grazing management and concession renewal				
5.4.2.4 Broadcast and Telecommunication Facilities	See 5.4.2									
5.4.2.5 Bee-keeping	See 5.4.2									
5.4.2.6 Private Dwellings and Structures	See 5.4.2	Decide future of Loch Katrine baches through management plan process				Decide future of Lower Selwyn huts				1. Lake Alexandrina bach settlements 2. Lake Ōhau baches
5.4.2.7 Accommodation	1. Criteria, conditions, monitoring 2. Formal agreements 3. Rentals						Licence private lodges in Cragieburn Conservation Park			Manage commercial concessions in Aoraki/Mount Cook village
5.4.2.8 Ski Areas	1. Inspections 2. Concession conditions 3. Liaison	N/A	N/A	N/A	N/A	N/A	Concessions update for 4 ski fields	Mt Hutt ski field Mount Dobsin ski field	N/A	1. Ōhau and Awakino ski fields 2. heli-skiing areas outside Aoraki/Mount Cook National Park
5.4.2.9 Aircraft	1. Effects based management 2. Monitoring 3. Advocacy for CAA overflight controls as required	Restricted aircraft activity in Lake Sumner RHA and other areas			Restrict aircraft activity in Oxford RHA	Restrict aircraft activity at coastal wetlands	Restrict aircraft landings as per Arthur's Pass National Park management plan	Restrict aircraft landings in the proposed Adams wilderness area		1. Monitor aircraft effects 2. Advocate for Civil Aviation Authority overflight controls as required 3. Consider helicopter landing concessions in Aoraki/Mount Cook National Park 4. Control aircraft use sites for heli-skiing outside Aoraki/Mount Cook National Park
5.4.2.10 Filming	See 5.4.2									
5.4.2.11 Guiding	See 5.4.2									Review Aoraki/Mount Cook National Park Management Plan
5.4.2.12 Sporting and Other Events	See 5.4.2						Coast-to-Coast and Avalanche Challenge concessions and monitoring	Sporting events likely to be incompatible in the proposed Adams wilderness area		Review Mount Cook National Park Management Plan
5.4.3 Prospecting, Mining and Quarrying	1. EIA requirement 2. Thorough assessment and monitoring					Kaitorete Spit mining site rehabilitation				

Key Result Areas	All Places	Hurunui	Lowry	Banks Peninsula	Puketeraki	Plains	Waimakariri	Rangitata	Pareora	Waitaki
5.4 Concessions and Other Uses (continued)										
5.4.4 Military Use	1990 Defence Training Agreement									
5.4.5 Traditional Māori Uses	Develop guidelines for the use of feathers, plant materials and whalebone									
5.5 Departmental Management										
5.5.2 Statutory Land Management	1. Protection of a broader range of indigenous ecosystems 2. Maintain and upgrade information on values of areas 3. Disposal of land of low natural, historic or recreational value 4. Meet statutory requirements of local government 5. Change status of high priority major land units 6. Implement Ngāi Tahu Claims Settlement Act	1. Tenure review 2. Rationalise Lewis Pass National Scenic Reserve and Lake Sumner Forest Park boundaries 3. Implement Loch Katrine management plan 4. Gazette St James Walkway		Port Hills and Lyttelton Harbour reserves management rationalisation	1. Tenure review 2. Torlesse and foothills conservation parks investigations	1. Te Waihora/Lake Ellesmere Ngāi Tahu settlement implementation 2. Te Waihora margin land exchanges	Tenure review	1. Tenure review 2. Upper Rangitata–Rakaia conservation park investigation	Tenure review	1. Tenure review 2. Ōhau–Ahuriri, Two Thumb Range and Hawkdun–Ōteakae conservation parks investigations 3. SWNZWHA management
5.5.3 Compliance and Law Enforcement	Wild Animal Control Act enforcement		Whitebait fishing regulations enforcement	1. Marine mammal sanctuary regulations enforcement 2. Whitebait fishing regulations enforcement		Whitebait fishing regulations enforcement				
5.5.4 Survey and Monitoring	1. Category A and B plants and animals 2. GIS - information use and integration	1. Tenure review 2. Forest bird monitoring 3. Ecological survey	1. Ecological survey 2. Historic survey	1. Hector's dolphin 2. Historic survey	1. Tenure review 2. Ecological survey 3. Historic survey	1. Te Waihora/Lake Ellesmere bird census 2. Ecological survey	1. Tenure review 2. Forest bird monitoring 3. Sporting events monitoring 4. Ecological survey	1. Tenure review 2. Ecological survey	1. Tenure review 2. Ecological survey	1. Tenure review 2. Braided riverbed wildlife communities 3. Ecological survey
5.5.5 Research	1. Category A and B plants and animals 2. Invertebrate, bat, fish and bird species 3. Ecological processes 4. Visitor impacts 5. Predator control	Orange-fronted parakeet hybridising		Hector's dolphin by-catch (CSL levy) and set-net interaction			Craigieburn conservation park FRI/Landcare research	Thar and other impacts	Information on long-tailed bats	1. Braided riverbeds 2. Tekapo Scientific Reserve 3. Thar and other impacts 4. Aircraft noise Aoraki/Mount Cook National Park
5.5.6 Environmental Protection	1. Statutory management 2. Recreation management						SH73 roading development			

Key Result Areas	All Places	Hurunui	Lowry	Banks Peninsula	Puketeraki	Plains	Waimakariri	Rangitata	Pareora	Waitaki
6. CMS Administration										
6.1 Plans and Functional Planning	1. Functional strategies * public awareness * ecosystems * fencing * species * historic resources * animal pests and wild animals * plant pests * recreation * interpretation 2. Bylaws/regulations	Finalise Loch Katrine management plan					1. Arthur's Pass National Park management plan (Cox-Binser addition) 2. Review by 2004			Aoraki/Mount Cook National Park management plan review (including concessions and village section).

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4. Place Objectives and Implementation

4.1 Introduction

4.1.1 Places

For this section of the CMS the Conservancy has been divided into nine place units. The majority of each place section is devoted to identifying priorities for that unit. This includes an explanation of the issue of concern, specific objectives and implementation statements detailing the methods that will be used to achieve the objectives.

4.1.2 Place Unit Definitions

These place units reflect a combination of natural characteristics and cultural interests. The following criteria were used to derive their boundaries:

- ecological region boundaries
- commonality of nature conservation issues
- recreation or tourism destinations
- Department of Conservation area boundaries
- Ngāi Tahu Rūnanga rohe (area)
- catchment boundaries
- local communities of interest

These place units are used for CMS purposes only. They do not necessarily coincide with other statutory, scientific or commonly used boundaries. The term “place” is used in this CMS in the manner that people use “a sense of place”, and is similar to the “geographic zones and subzones” and “management areas and sub areas” used in the adjoining Otago and West Coast CMSs [Otago Conservation Management Strategy (1998) and West Coast Conservation Management Strategy 1996–2005 draft volume 1 (1996)] respectively.

A brief description and guide to each place unit boundary and the land managed within them by the Conservancy follows.

Hurunui

The Hurunui unit includes the Hanmer Conservation Park, the Lake Sumner Conservation Park, and the Lewis Pass National Scenic Reserve and conservation area. It extends from the summit ridge of Dampier Range in the south, along the main divide, and follows the northern Conservancy boundary. The eastern boundary is the Wandle River and the western edge of the Culverden Plain.

Lowry

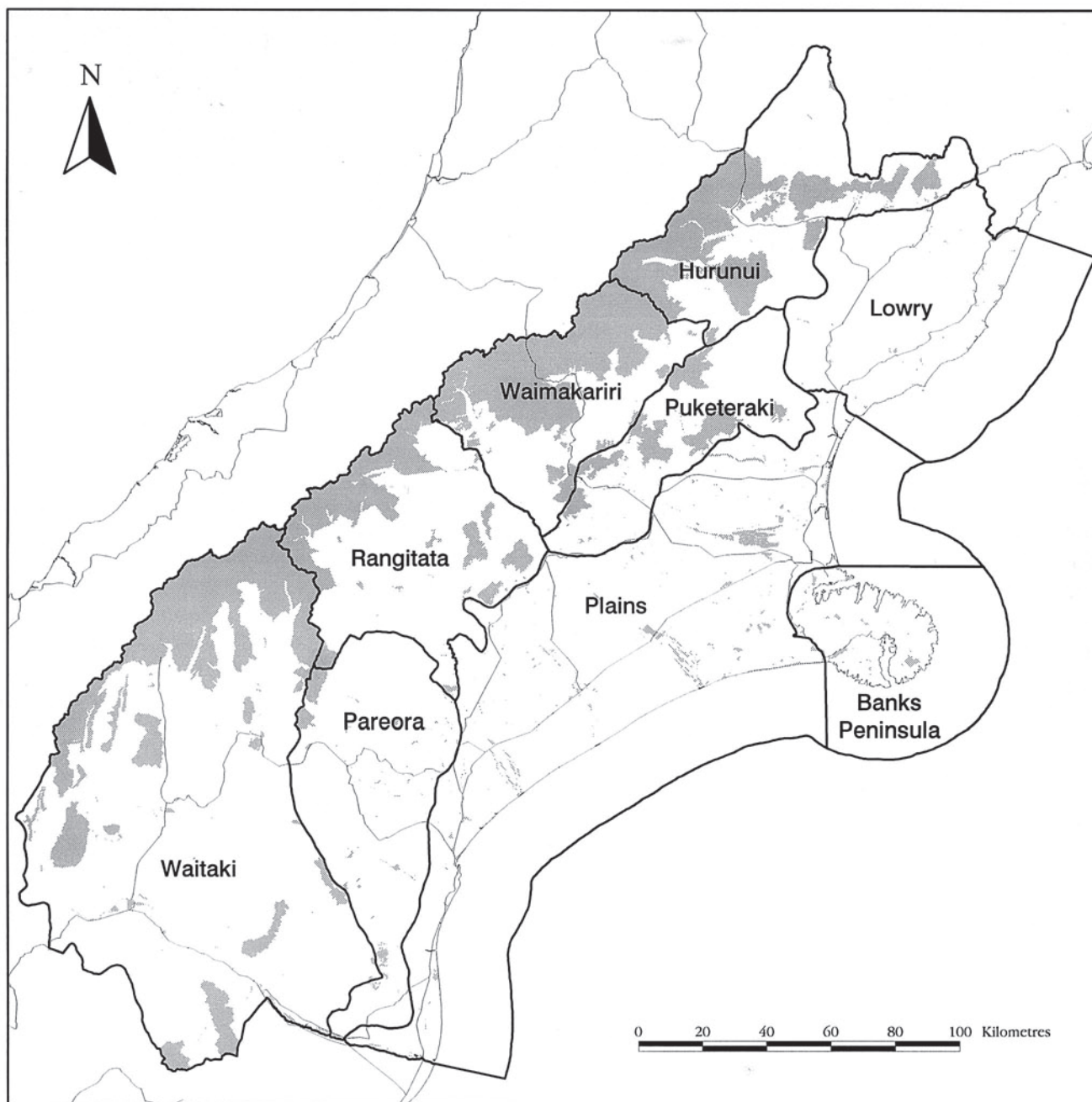
The Lowry unit includes all North Canterbury coastal reserves managed by the Department. It consists largely of the Lowry Ecological Region. It extends from the Waipara River in the south, westwards along the western edge of the Culverden Plain to the Wandle River. The northern boundary follows the Conway River and to the east extends from the coast to the 12 nautical mile (22.2 kilometre) territorial sea limit.

Banks Peninsula

The Banks Peninsula unit includes all Port Hills and Banks Peninsula reserves managed by the Department. It consists of the Banks Peninsula Ecological Region. It includes all of the Port Hills and Banks Peninsula and

extends to the 12 nautical mile (22.2 kilometre) territorial sea limit.

Map 2 CMS Place Units



- CMS Place Unit Boundaries
- State highway
- Land managed by the Department

See 4.1.2 for a description of place boundaries

Map 2: CMS Place Units

Puketeraki

The Puketeraki unit includes the Oxford and Mount Thomas foothill forests (conservation areas). It consists partly of the Canterbury foothills, Canterbury plains and Puketeraki ecological regions. The unit extends eastward along the summit ridges of the Ben More, Torlesse and Puketeraki Ranges, until it meets the Lowry unit boundary at the Waipara River. The eastern boundary is the seaward edge of the North Canterbury foothills.

Plains

The Plains unit includes all the Waimakariri coastal reserves, the reserves and conservation areas of Te Waihora/Lake Ellesmere, and Wainono Conservation Area. It includes most of the Canterbury Plains and Wainono ecological regions. The unit extends eastward from the Canterbury foothills and extends to the 12 nautical mile (22.2 kilometre) territorial sea limit.

Waimakariri

The Waimakariri unit includes Arthur's Pass National Park, Craigieburn Conservation Park, Castle Hill Conservation Area, and the Cave Stream Reserve. It consists largely of the Hawdon and Puketeraki ecological regions. The southern boundary is the Rolleston Range and the Rakaia River, and extends northward along the main divide as far as the Dampier Range. The eastern boundary is the summit ridges of the Ben More, Torlesse and Puketeraki Ranges.

Pareora

The Pareora unit includes the reserves and land managed by the Department along the Hunters Hills and Fairlie Basin. It consists of the Pareora Ecological Region. It extends from the Waitaki river, along the summit ridges of the Hunters Hills and Two Thumb Range as far as the Rangitata River. The eastern boundary is the Canterbury plains.

Rangitata

The Rangitata unit includes all of the land managed by the Department in the central Southern Alps/Kā Tiritiri o te Moana area, the Lake Heron Nature Reserve, and the Mount Somers and Mount Hutt conservation areas. It consists largely of the D'Archiac and Heron ecological regions. It extends along the Southern Alps/Kā Tiritiri o te Moana from the Two Thumb Range as far as the Rolleston Range and Rakaia River in the north. It is bounded to the east by the western edge of the Canterbury plains.

Waitaki

The Waitaki unit includes Aoraki/Mount Cook National Park, Lindis Pass Scenic Reserve, and the Ōhau, Kirkliston and other conservation areas of the Waitaki Basin. It consists largely of the D'Archiac, Tasman, Lakes, Mackenzie, Waitaki and Kakanui ecological regions. The unit follows the Conservancy boundaries of the Hawkdun and Kakanui Ranges in the south, and extends along the main divide as far as the Two Thumb Range. The eastern boundary is the summit ridges of the Two Thumb, Rollesby and Hunters Hills ranges.

4.1.3 Place Priorities

Introduction

The natural and historic character of each of the place units (e.g. Banks Peninsula) and the current conservation efforts of the community, this Conservancy and other agencies create issues that require resolution over the next ten years. Many of the specific objectives for the Conservancy are outlined in Part 5 (Activity Objectives and Implementation) and will be implemented in each place on an ongoing basis. Examples include: plant and animal pest control programmes, landowner liaison, recreational facility maintenance, and historic management.

Issues

Some issues have particular significance in each place and are a Conservancy priority for attention. They may involve a range of different activities, with a requirement for multiple focus of Conservancy effort. The issues

that require special effort from the Conservancy over the next ten years have been identified as key priorities.

Priorities

To help resolve central conservation issues and to guide its activities, the Conservancy has established key priorities for the next ten years. These priorities are summarised in tables (one for each place unit) along with the issues, results sought and the relevant activity sections.

To provide integrated solutions to complex problems, Conservancy policies will often require implementations from more than one activity section. For example, the management of coastal estuaries could include people participation, rúnanga involvement, ecosystem and species protection, plant and animal pest management, and RMA methods.

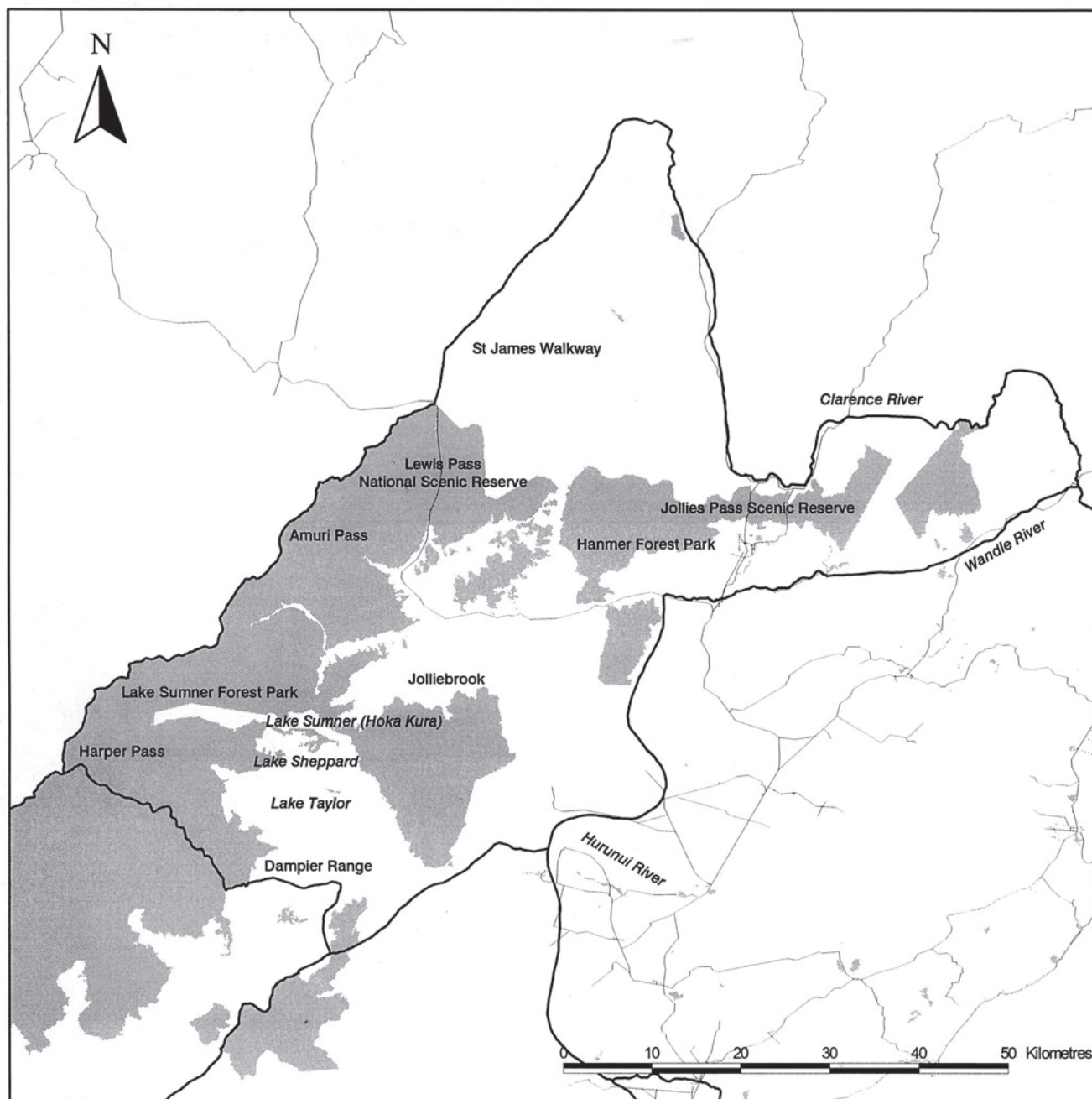
Each priority for departmental action in a place has an equivalent priority in Part 5 of this CMS. There are summarised in Table 3 (3.2 Key Priorities). Departmental activities that are not key priorities within each place are described in the relevant activity section (Part 5).

Less Achievable Tasks

However, there are also tasks and actions that the Department of Conservation may not be able to undertake within the next ten years, given the present resources and technology, and without external assistance. These are identified immediately preceding the key priority table for each place unit. Interested individuals and groups are encouraged to contribute in these areas.



Map 3 Hurunui



- CMS Place Unit Boundaries
- Main roads
- Land managed by the Department



4.2 Hurunui

Introduction

The Hurunui unit includes the Hanmer Forest Park, the Lake Sumner Forest Park and the Lewis Pass National Scenic Reserve.

Features and Issues

People Partnership

The area is sparsely populated and contains only a few small towns, most notably the tourism centre of Hanmer Springs where the Hurunui Visitor Information Centre is run by the Hurunui District Council. Kaikōura and Ngāi Tuahuriri are the Papatipu Rūnanga.

Extensive pastoralism and exotic forestry are important to the area and it is important that the Department and landholders establish and retain a positive working relationship (e.g. for wilding tree control work).

The Hurunui Lakes Working Party, with representation from runholders, the Department, Ngāi Tahu, Canterbury Regional Council, Hurunui District Council, the North Canterbury Conservation Board and recreation and conservation groups, has worked on recommendations on the integrated management of natural resources in the Upper Hurunui/Lake Sumner catchment.

Heritage Conservation

The Hurunui unit is a moderately glaciated western mountain and valley system. It is dominated by beech forest associations in the west, grading eastward to rolling hill country with remnant forest and tussock and shrubland cover. The area features Lake Sumner and surrounding lakes, and geothermal springs that are of ecological and recreational interest. The Department manages most of the area west and north of Lake Sumner as far as Lewis Pass.

The forest bird life is the most diverse in the Conservancy. Great-spotted kiwi/roa are found in good numbers, and yellowhead/mohua are present in some areas. Further survey, monitoring and management work is necessary to safeguard this important bird community.

Weeds, particularly broom and wilding pines, are major problems for agriculture and indigenous ecosystems in the area. Plant pest control will be undertaken as required (e.g. nassella tussock and broom), according to programmes agreed between the Department, landholders and the Canterbury Regional Council.

No comprehensive ecological survey has been completed for the area. Although highly modified in the east, there remains a high degree of naturalness, particularly in the more northern and western parts of the unit.

Human History

This area contains the easiest passes to the West Coast (Te Tai Poutini) from Canterbury. The passes were utilised by Māori for travel and trade, particularly in the precious pounamu (greenstone). The Hurunui lakes were extensively used for mahinga kai, particularly for waterfowl and eels/tuna, and remain an important site.

Early European pastoral settlement in the mid-1800s has left some fine examples of buildings dating from this era, such as Dozy Stream hut (mud and stud), Eskhead station homestead (cob construction), Glens of Tekoa (sod homestead) and the Acheron accommodation house (cob construction). Remnants of benched tracks dating from this period exist near the head of the Harper and Amuri passes.

Recreation and Use

The Hanmer Springs area is a popular resort, based on the local alpine scenery, hot springs and the recreational value of the exotic forests planted in the early 1900s. Canterbury people regularly make weekend trips to the area. Hanmer Forest Park is extremely popular over the summer holiday period, attracting more than 200,000 visitors a year. The hot springs attract 340,000 visitors per year.

The Upper Hurunui Lakes, Lewis Pass area, and Lake Sumner Forest Park is a highly significant outdoor adventure playground, particularly for water-based recreation. The St James Walkway has the potential to become more significant for local and international visitors. The Outdoor Education Centre at Boyle River is probably the best-known centre of its type in Canterbury. The Hurunui River has a national-grade kayak slalom course.



The Upper Hurunui Lakes area, in particular, is popular for angling and gamebird hunting, and also for off-road vehicle use. This last usage is having adverse effects on local roads and adjacent indigenous ecosystems in the Lake Sumner vicinity. An unlicensed holiday settlement of caravans and huts exists on the shores of Loch Katrine.

Mountain-biking is popular in the Hanmer Springs area with access over Jacks and Jollies Pass to Lake Tennyson and beyond. The vehicle routes through Molesworth Station, via the Acheron or the Rainbow Rivers, are becoming increasingly popular. The multi-day canoe trip down the Clarence River attracts canoeists and rafters from throughout the country.

Areas Managed by the Department

The following areas managed by the Department are described in more detail in Volume 2, Schedule 2:

Name	Unit
Hanmer Forest Park	N32007
Hossack Conservation Area	N31001 includes N31002
Jollies Pass Scenic Reserve	N32001
Lake Guyon Scenic Reserve	M31003
Lake Sumner Conservation Area, lakehead marginal strips	L32007
Lake Sumner Forest Park	L32001
Lake Taylor marginal strip	L33020, includes L33003
Lake Tennyson Scenic Reserve	M31002
Lewis Pass Scenic Reserve, national reserve	M31004, includes M31005, M31009
Loch Katrine Recreation Reserve	L32008
Lower Doubtful and Boyle River Conservation Area	M32014
Nina -Doubtful Rivers Conservation Areas	M3200
Pāhau Conservation Area	L32011
Part of Woodbank run	M32012
Raupō Pond	L33002
Seaward Forest Conservation Area	M33025
Terako Downs Scenic Reserve	N32113
Wairangi Scenic Reserve and adjacent conservation area	N32033, includes N32034

Key Priorities

4.2.1 Hurunui Ecosystems and Species

Issues

The unit consists of seven ecological districts, none of which have been formally surveyed under the PNA programmes (see 5.5.4 Survey and Monitoring). Five of these have significant areas managed by the Department. Large areas of land managed by the Department, the two exceptions being Miromiro and Leslie.

There is a need to gather more information on the natural values of the areas. While progress has been made in adding to the network of protected areas, the full range of types of vegetation and natural landscape types is not yet covered. Many areas outside land managed by the Department need greater recognition and protection.

The Lake Sumner Forest Park has the richest forest bird diversity in Canterbury. Great-spotted kiwi/ro-ro, yellowhead/mohua (threatened), kākā, kea, orange-fronted parakeet/kākāriki-whero (endangered), and blue duck/whio (threatened) are present. Bats/pekapeka may exist in the area. Some, or all, of these species are at risk, principally from predation by introduced mammalian predators. (See Volume 2, Schedule 2, Lake Sumner Forest Park unit).

The Conservancy has instigated a 'mainland island restoration programme' in the upper catchment of the Hurunui River. This programme aims to enhance a suite of species such as beech forest birds and plant species. These include what is thought to be the only population of orange-fronted parakeets in New Zealand, the largest population of mohua in Canterbury, and other forest species such as kaka, great-spotted kiwi and robins.

Tenure review of pastoral leases is an active process in this unit, providing opportunities for natural values protection.



Objectives

- To identify the significant indigenous vegetation and threatened plant and animal species of the Hurunui unit.
- To use a range of effective methods to protect the indigenous biodiversity of the Hurunui unit.
- To protect and enhance the viability of priority threatened species' populations and their habitat(s) in the Hurunui unit.

Implementation

The Conservancy will:

1. Survey the ecological values of the Miromiro and Leslie ecological districts.
2. Negotiate with landholders to protect significant areas of indigenous vegetation/wildlife habitat (see 5.2.3 Land Ecosystems), including through the tenure review process.
3. Undertake research/survey to clarify the distribution, status, habitat preferences and threats of the following species:
 - Reptiles
 - scree skink
 - striped skink
 - Birds
 - yellow-crowned parakeet/kākāriki-whereo
 - southern crested grebe/kāmana
 - mohua/yellowhead
 - great-spotted kiwi/roaroa
 - New Zealand falcon/kārearea
 - blue duck/kowhiowhio
 - kākā
 - Plants
 - any relevant species under 'All places' in Appendix 2: Indigenous Species Priorities.
 - Fish
 - short-jawed kōkopu
4. Advocate effective means to avoid adverse effects to the habitat of blue duck and long-jawed kōkopu in Canterbury Regional Council and Hurunui District Council plans.
5. Advocate for the protection of indigenous biodiversity, including the habitat of threatened species and the healthy functioning of ecosystems.
6. Undertake animal pest control to reduce their threat to: yellow-crowned parakeet, yellowhead, and kākā.
7. Establish and maintain a Hurunui mainland island habitat consistent with approved operations plans.
8. Seek formal habitat protection for the short-jawed kōkopu.
9. Utilise media, publications, interpretive material and personal contact to outline the management issues associated with kea.

4.2.2 Wilding Tree/Broom Control

Issues

Wilding pines are spreading into land managed by the Department and displacing indigenous vegetation. The open tussock/grassland cover of the Hurunui unit makes this a serious problem. The spread of broom on the hillsides and river beds also threatens natural and historic values in many places. Priorities for control that are sustainable into the future need to be established, so that the long-term benefits in protecting indigenous plant communities can be maximised.

Objective

- To set and implement priorities for wilding pine and broom control and maximise benefits for indigenous biodiversity.

Implementation

The Conservancy will:

1. Develop an operation plan for wilding pine and broom control in the area.
2. Focus wilding control in Hanmer Forest Park, the Jolliebrook catchment of Lake Sumner Forest Park, Lewis Pass National Scenic Reserve and Jollies Pass Scenic Reserve.



3. Focus broom control in the Jolliebrook catchment of Lake Sumner Forest Park, and Jollies Pass Scenic Reserve.
4. Encourage suitably qualified volunteer and community participation in plant pest control operations.

4.2.3 Lewis Pass National Scenic Reserve and St James Walkway

Issues

The St James Walkway and the Lewis Pass National Scenic Reserve provide recreation opportunities that are regionally significant, and they are also areas of high ecological value. There is a need to provide easily accessible roadside recreation facilities that will enhance enjoyment of the area (see 4.2.5 SH7 Scenic Corridor Protection, Interpretation and Recreation Facilities). The current boundaries of the Lewis Pass National Scenic Reserve and surrounding land are based on old administrative boundaries and could be rationalised, taking into account any land management changes arising from tenure review. Fencing on the southern boundary of the reserve must be maintained in a stock-proof condition to prevent animals entering the reserve or the adjacent SH7. (See also Volume 2, Schedule 1 M31 004, 005 and 009, Lewis Pass National Reserve.)

Objectives

- To provide recreation facilities appropriate to identified recreation needs and in keeping with the high landscape values of the area and its remote experience qualities.
- To rationalise the boundaries of the Lewis Pass National Scenic Reserve and adjacent land managed by the Department.
- To prevent unauthorised stock intrusion into the reserve.

Implementation

The Conservancy will:

1. Investigate the upgrading or construction of short walks and picnic areas in the Lewis Pass area.
2. Maintain a network of public recreation facilities, including tracks, huts and bridges.
3. Gazette the St James Walkway over land not managed by the Department.
4. Investigate and, if necessary, rationalise Lake Sumner Forest Park and Lewis Pass National Scenic Reserve boundaries.
5. Ensure the margins of the reserve are adequately fenced to prevent unlicensed stock intrusion.
6. Control aircraft landings in the reserve to maintain natural quiet and to avoid visitor disturbance.

4.2.4 Lake Sumner Forest Park and Hurunui Lakes Management

Issues

The Lake Sumner Forest Park includes the upper catchments of the South and North Hurunui, Hope, Doubtful and Nina rivers. In the Hurunui and Hope valleys there is a complex relationship between land managed by the Department and pastoral leasehold land that occupies part of the valley floors. This requires careful management and advocacy by the Department. It is important to maintain present opportunities for recreational use, including access.

The Lake Sumner Recreation Hunting Area is popular for deer and chamois hunting.

Lake Sumner (Hoka Kura), Loch Katrine, Lake Taylor and Lake Sheppard are among a group of remote high country lakes. The beds of the lakes are Crown land. The lack of permanent settlements in the vicinity is a feature of this area. This makes the Upper Hurunui and lakes distinctly different from other parts of Canterbury.

A vehicle track exists to Loch Katrine, and boats can use a connecting stream for access to Lake Sumner. Some modification of the stream has occurred and boat access increases potential aquatic plant pest spread. However, use of this stream reduces the desire for vehicle access to Lake Sumner.

The location of private huts, the extent of vehicle access and the types of recreational use are ongoing issues. The lakes and other wetlands also have important ecological values, which will be dealt with in the Department's ongoing advocacy role with the regional and district councils. The Conservancy is preparing a management plan for the Loch Katrine Recreation Reserve. (See also Volume 2, Schedule 2, Loch Katrine Recreation Reserve unit.)



Objectives

- To manage the natural and historic resources and recreation values of Lake Sumner Forest Park.
- To advocate to avoid adverse effects on the remote character and ecological values of the Hurunui lakes area.

Implementation

The Conservancy will:

1. Support the findings of the Hurunui Lakes Working Party, which recognise the area's semi-wilderness and high ecological values.
2. Investigate the development of appropriate shelters at Loch Katrine and Lake Taylor; and plantings for informal camping at Loch Katrine.
3. Maintain a network of public recreation facilities, including tracks, huts, toilets and bridges.
4. Advocate to the Hurunui District Council for methods that avoid, remedy or mitigate the adverse effects of off-road vehicles on natural and historic resources and recreation values.
5. Rationalise the status of land managed by the Department in the vicinity of Loch Katrine Recreation Reserve.
6. Complete, obtain approval and implement the Loch Katrine Recreation Reserve Management Plan to resolve ongoing bach issues.
7. Liaise with Lakes, Lake Taylor, Esk Head and Poplars stations over management issues in the area.
8. Support investigations and applications for a water conservation order for the upper Hurunui River and catchment.
9. Manage aircraft landing concessions to protect the remote character of the area.

(See also 4.2.2 Wilding Tree/Broom Control and 4.2.3 Lewis Pass National Scenic Reserve and St James Walkway.)

4.2.5 SH7 Scenic Corridor Protection, Interpretation and Recreation Facilities

Issues

The Lewis Pass Highway (State Highway 7) is a major entry and exit route for visitors to Canterbury. An opportunity exists to both protect its natural resources and develop an integrated package of interpretive and recreational developments that can enhance visitors' experiences and increase conservation awareness (see 5.3.3 Recreation Facilities).

Objectives

- To protect the natural and historic resources adjacent to the Lewis Pass Highway.
- To upgrade State Highway 7 roadside recreation and interpretation facilities.

Implementation

The Conservancy will:

1. Liaise with Hurunui District Council to promote and seek protection for the natural and historic resources along State Highway 7 to Lewis Pass.
2. Develop and implement an interpretation programme for State Highway 7, in conjunction with other agencies.
3. Liaise with Transit New Zealand, Canterbury Regional Council, and Hurunui District Council over planning, design and funding issues.
4. Upgrade and maintain key departmental recreation facilities alongside State Highway 7.

Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include:

- extensive broom control
- possum control for the purpose of protecting beech forest ecosystems.
- extensive wilding pine control
- maintenance of low-priority tracks and huts
- bird management
- invertebrate management
- control of cherries and rowan

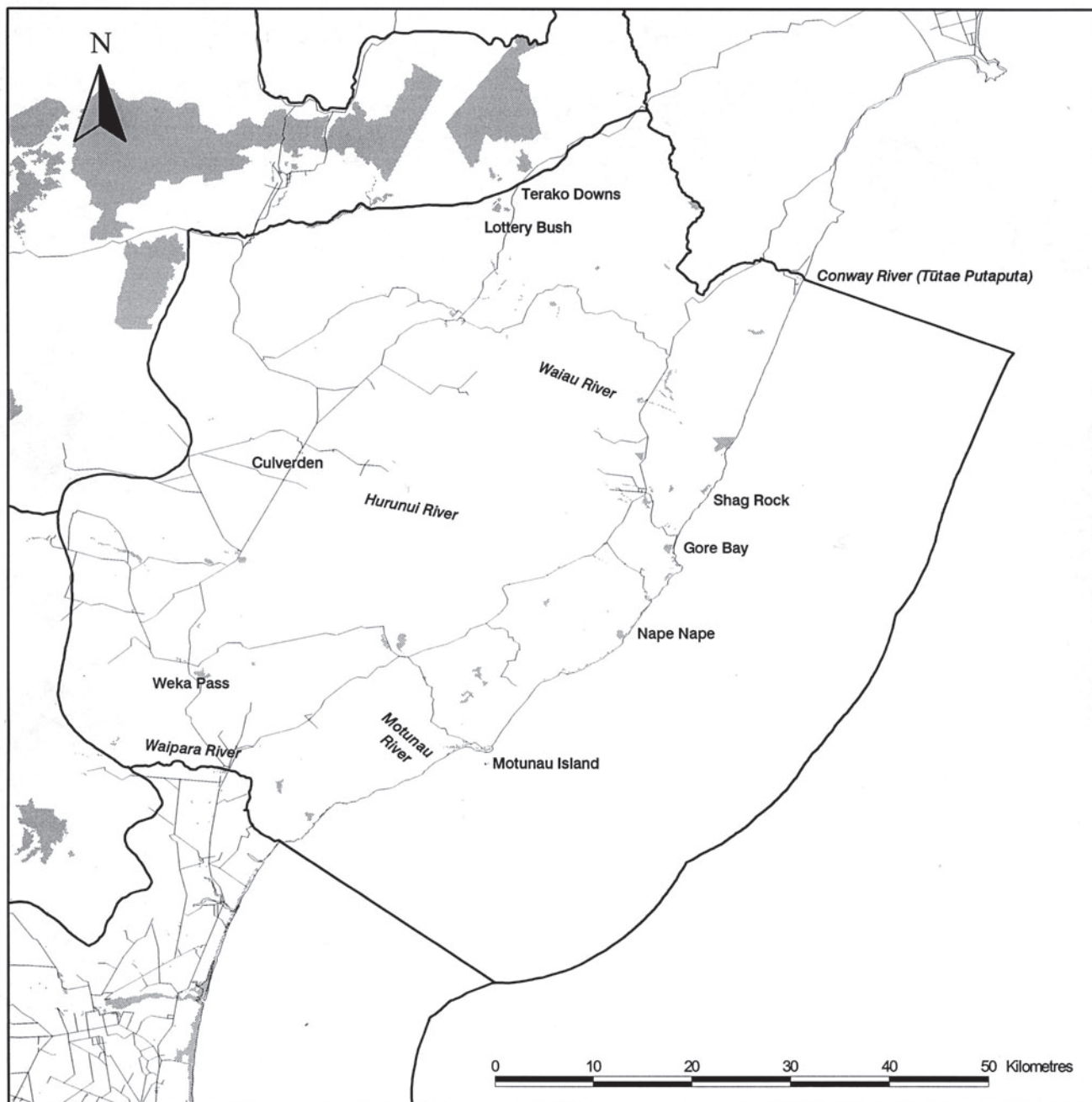


Table 4: Key Priorities for Hurunui Unit

Name	Issue	Method	Result Sought	CMS Activity
4.2.1 Ecosystems and Species	1. The area has not been fully surveyed for its remaining ecological values 2. Many threatened forest bird species dwell in the area	1. Ecological survey 2. Reservation 3. Covenant 4. RMA advocacy 5. Landholder liaison 6. Predator control 7. Mainland island restoration programme 8. Tenure review	1. Full ecological survey coverage completed and significant sites and species protected 2. Self-sustaining species populations	5.1.4 Communication & Liaison 5.2.3 Land Ecosystems 5.2.4 Freshwater Ecosystems 5.2.6 Indigenous Species
4.2.2 Wilding Tree/Broom Control	Wilding pines and broom are impacting on native plant communities	Physical, chemical and biological control	Wilding tree and broom control priorities developed and control implemented	5.1.3 Community Participation 5.2.9 Plant Pests and Exotic Plants
4.2.3 Lewis Pass National Scenic Reserve and St James Walkway	The St James Walkway and Lewis Pass National Scenic Reserve have recreation and ecological values.	1. Public facility 2. Rationalise boundaries 3. Fencing 4. Manage aircraft landing concessions	Greater visitor numbers catered for without significant affects on nature conservation values	5.3.3 Recreation Facilities 5.3.4 Visitor Impacts and Safety 5.4.2 Concessions General 5.5.2 Statutory Land Management
4.2.4 Lake Sumner Forest Park and Hurunui Lakes Management	1. High semi-wilderness and ecological values 2. Extent of road access and recreational facilities 3. Private structures on recreation reserve at Loch Katrine	1. Loch Katrine Management Plan 2. Agreement with Hurunui District Council on road access extent and settlement 3. Support Hurunui water conservation order 4. Control aircraft access	The area's semi-wilderness and ecological values are recognised and activities are compatible with its status	5.2.4 Freshwater Ecosystems 5.3.2 Recreation Opportunities 5.3.3 Recreation Facilities 5.4.2 Concessions General 5.5.2 Statutory Land Management 6.1 Plans and Functional Strategies
4.2.5 Scenic Corridor Protection, Interpretation and Recreation Facilities	Lewis Pass highway is a major entry route to Canterbury for tourists. The opportunity exists to enhance their experience and conservation understanding	Development of an integrated package of interpretation and facility upgrades	The public are more informed of the area's natural and historic values	5.3.3 Recreation Facilities 5.3.6 Interpretation



Map 4 Lowry



- CMS Place Unit Boundaries
- Main roads
- Land managed by the Department



4.3 Lowry

Introduction

The Lowry unit contains the coastal hills and ranges north of the Waipara River to south of the Conway River. It includes the inland basin of Culverden and is crossed by the Hurunui and Waiau rivers and several spring-fed streams. Limestone landforms are a distinctive feature.

Features and Issues

People Partnership

Evidence of past Māori occupation includes groves of karaka, rock drawings, middens, and pā site remains on a terrace at the mouth of the Waipara River. These sites are vulnerable, and local Pāpatipu Rūnanga (Te Ngāi Tuahuriri and Kaikōura) have concerns about their well-being. There are marine issues that Te Ngāi Tuahuriri Rūnanga and the Department need to work through.

Today, the area is sparsely populated and its few towns support agriculture and transport businesses. The coastal area around Gore Bay is a holiday destination for people from all over Canterbury. There is some rural and coastal tourism. Community interest groups include Hurunui District Council, recreational and commercial fishing groups, Federated Farmers and landcare groups.

Heritage Conservation

The geology of the area is dominated by greywacke and argillite rock. Significant limestone outcrops also occur, notably in the Weka Pass area. The topography varies from the flat Culverden basin to rolling hill country, and a rugged and dramatic coastal environment. Two major rivers, the Hurunui and the Waiau, flow through this area.

A variety of indigenous plant communities characterise the area, particularly remnant coastal hardwood forest, mixed shrubland, savannah woodlands, and tussock grasslands. The largest kākara woodland in Canterbury is found near Medbury. Areas of remnant podocarp forest such as Wandle Bush, Terako Downs and Lottery Bush are significant. Prostrate kōwhai and cabbage trees/ti rākau are indigenous features of particular interest. This unit is notable for containing some biotic elements from Marlborough, and for communities associated with limestone.

There is no comprehensive ecological survey for the area. There are important remnants of indigenous communities associated with wetlands, limestone outcrops and tussock grasslands in the area. Two keys to conservation in the Lowry unit are the identification and protection of remnant communities and habitat types, and the maintenance of linkages between remnant indigenous communities. The Hurunui and Waiau rivers provide important fish and wildlife habitats.

The coastal environment from the Waipara River to the Conway River (Tūtae Putaputa) is ecologically diverse and has high scenic values. The values of the marine ecosystem are not well known. Excellent habitat exists for the New Zealand fur seal which is present in growing numbers at the breeding colony of Shag Rock, and also at the haul-out area at Napenape.

Motunau Island is of international significance as a habitat for seabird species (such as fairy prion) but is at threat from boxthorn infestation. It is the most important seabird breeding area between the Marlborough Sounds and Foveaux Strait. It is also the main breeding colony of the white-flipped penguin.

Human History

The coastal area was traditionally used by Māori on their travels north and south, with many archaeological sites remaining at the Hurunui River, Waipara River, Conway River, Motunau, and Gore Bay. Groves of karaka, which exist at Gore Bay, were planted as mahinga kai (food) sources. The rock drawings at Weka Pass date back to the moa-hunter period of Māori settlement.

Early European settlement was dominated by the large pastoral estates, such as Cheviot and Glenmark. Historic features associated with transport are the Hurunui Hotel and the Weka Pass Railway.

Recreation and Use

Recreation is centred on the coastal area and rivers. The beaches and river mouths provide good fishing spots and diving for shellfish is also popular. Camping is provided for in a number of locations usually associated with good fishing areas or swimming beaches, such as Gore Bay. Baches are also used for extended stays by holiday-makers at Gore Bay and at Motunau Beach.



The coastal hills provide opportunities for walking and tramping. Tracks exist in the coastal scenic reserves at Gore Bay and Napenape, and the Port Robinson Walkway, with its coastal views, is popular. The Waiau and Hurunui rivers are popular for rafting, kayaking, jet-boating, fishing and gamebird hunting.

Areas Managed by the Department

The following areas managed by the Department are described in more detail in Volume 2, Schedule 2.

Name	Unit
Balmoral Lookout	N33046
Boundary Creek Scenic Reserve	N33039, includes N33041
Cranky Tom Scenic Reserve	N33040
Culverden Scientific Reserve	N33010
Gore Bay Scenic Reserve	O33049
Lottery Bush Scenic Reserve	N32038, includes N32045
Motunau Island Nature Reserve	N34020
Motunau River marginal strip	N34047
Mount Ararat Rātā Reserve	N34004
Napenape Scenic Reserve	N33044
Proposed Waipara Gorge Scenic Reserve	M34123
Pt Tiromoana Scenic Reserve (Cass Peak area)	N34021
Pt Tiromoana Scenic Reserve (Ella Peak area)	N34023
Shag Rock Scenic Reserve	O33070
Teviotdale Archaeological Site	N34046
Waiau Rivermouth Scenic Reserve	O33005
Weka Pass Historic Reserve	M33038

4.3.1 Landscape and Historic Resource Management

Issues

The landscape character of features such as the coastal environment and adjoining hill country, the gorge sections of the Waipara and Hurunui rivers, and limestone outcrops, are important assets of the area.

Rock drawings are largely found in fragile limestone environments, which are vulnerable to damage by, for example, stock rubbing against the limestone surface. The Weka Pass Historic Reserve is managed by, for example, the Department and contains the large Timpendean rock shelter and rock drawing assemblage.

Objectives

- To promote the enhancement of the landscape integrity of the coastal environment, river gorges and limestone areas in the Lowry area.
- To co-operate with and assist Te Rūnanga o Ngāi Tahu and Papatipu Rūnanga and the New Zealand Historic Places Trust in protecting rock art sites, in accordance with the outcomes of the *Deed of Settlement* (1997).

Implementation

The Conservancy will:

1. Advocate that the Hurunui District Plan contain objectives, policies and methods requiring that activities avoid adverse effects on the natural character of:
 - the coastline and coastal hills
 - the river gorges
 - the limestone areas
 - geopreservation sites
2. Co-operate with Re Rūnanga o Ngāi Tahu, Papatipu Rūnanga, the New Zealand Historic Places Trust and the Hurunui District Council in the development and maintenance of an accurate database, such as a photo library.
3. Continue site inspections and maintenance work on rock art sites.
4. Maintain the Weka Pass Historic Reserve rock drawings protection fence.



4.3.2 Ecosystems and Species

Issues

The unit consists of five ecological districts, three of which have been formally surveyed under the PNA programme (see 5.5.4 Survey and Monitoring). Departmental reserves in the area are small and largely restricted to the coastal area.

The unit's ecological character is under-represented in the existing protected natural area system. Many areas outside land managed by the Department need greater recognition and protection. There is a need to gather more information on the natural values of the area. Motunau Island is the largest island habitat in Canterbury for seabirds, and is predator-free (see Volume 2, Schedule 2, Motunau Island Nature Reserve). It is habitat for white-flipped penguin/kororā, fairy prion/titi, and burrowing seabirds such as white-faced storm petrels/titi, sooty shearwaters/titi, black-backed gulls/karoro, variable oystercatcher/tōrea-pango, and red-billed gulls/tarāpuka. Forty-five species of bird have been recorded on the island. Pied shag/kōau breeding colonies exist at the Motunau River and Boundary Stream mouths.

Objectives

- To identify the significant indigenous vegetation and threatened species of the Lowry unit.
- To use a range of effective methods to protect the indigenous biodiversity of the Lowry unit.
- To protect and enhance the viability of priority threatened species' populations and their habitat(s) in the Lowry unit.

Implementation

The Conservancy will:

1. Survey the ecological values of the Waikari and Waiau ecological district (see 5.5.4 Survey and Monitoring).
2. Negotiate with landholders to protect significant areas of indigenous vegetation and wildlife habitats (see 5.2.3 Land Ecosystems).
3. Undertake research or surveys to clarify the distribution, status, habitat preferences and threats of the following species in the unit:
 - Plants
 - Coprosma violacea
 - Tupeia antarctica
 - Birds
 - white-flipped penguin/kororā
4. Advocate for the protection of indigenous biodiversity, including the habitat of threatened species and the healthy functioning of ecosystems.
5. Advocate for effective means in Canterbury Regional Council and Hurunui District Council plans to avoid adverse effects to white-flipped penguin.
6. Manipulate white-flipped penguin habitat to enhance the species' population.
7. Seek formal habitat protection for the white-flipped penguin.
8. Undertake plant and animal pest control to reduce the threat of plant and animal pests to white-flipped penguin.

4.3.3 Motunau Island

Issues

Motunau Island Nature Reserve supports a major colony of fairy prion/titi, and is the main breeding colony of white-flipped penguin/kororā. Bird life on the island is greatly impacted by the introduced weed, boxthorn. Motunau River and Boundary Stream mouths have adjoining pied shag/kōau breeding colonies located in trees. Surrounding marine areas are rich in aquatic life.

Objectives

- To protect seabirds from the impact of boxthorn.
- To maintain and enhance the natural values of the island.
- To keep Motunau Island free of predators.



Implementation

The Conservancy will:

1. Develop and implement a boxthorn control programme which includes advocacy for control on neighbouring mainland sites.
2. Survey marine resources around Motunau Island.
3. Provide procedural and policy advice to groups and organisations investigating or promoting marine reserves. This will involve consultation with Te Ruunanga o Ngāi Tahu, Te Ngāi Tuahuriri Rūnanga and the local community.
4. Process applications for marine reserves.
5. Liaise with the Ministry of Fisheries over marine reserve applications.
6. Support the monitoring of key wildlife species on Motunau Island.
7. Seek to obtain reserve status for Crown land foreshore around Motunau Island. This is additional to the 'deemed' reserve status arising from section 20(3) of the Reserves Act 1977.
8. Control island access to prevent introduction of new exotic species (including predators).

4.3.4 Marine Reserves

Issues

The Lowry coastline is physically and ecologically diverse. It contains Motunau Island, Gore Bay, the large seal colony at Shag Rock, large river mouths and numerous other features of interest. Development threats are low, fishing is significant and there are major opportunities for marine reserve initiatives. Te Ngāi Tuahuriri Rūnanga seek better protection of Waipara Beach, and feel that taiapure would be the most suitable protection mechanism.

Objectives

- To survey marine resources in important areas of interest.
- To process applications for marine reserves within the area.

Implementation

The Conservancy will:

1. Survey marine resources in areas of ecosystem significance.
2. Work with community groups and Papatipu Rūnanga to identify marine reserve and other options and areas of interest.
3. Provide procedural and policy advice to groups and organisations investigating or promoting marine reserves. This will involve consultation with Te Rūnanga o Ngāi Tahu, Te Ngāi Tuahuriri Rūnanga and the local community.
4. Process applications for marine reserves.
5. Liaise with the Ministry of Fisheries over marine reserve applications.

Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include:

- complete control of nassella tussock
- complete control of woody exotic species in savannah communities
- implementation of protection for all significant areas identified in Cheviot/Motunau PNA Survey
- applying for marine reserves

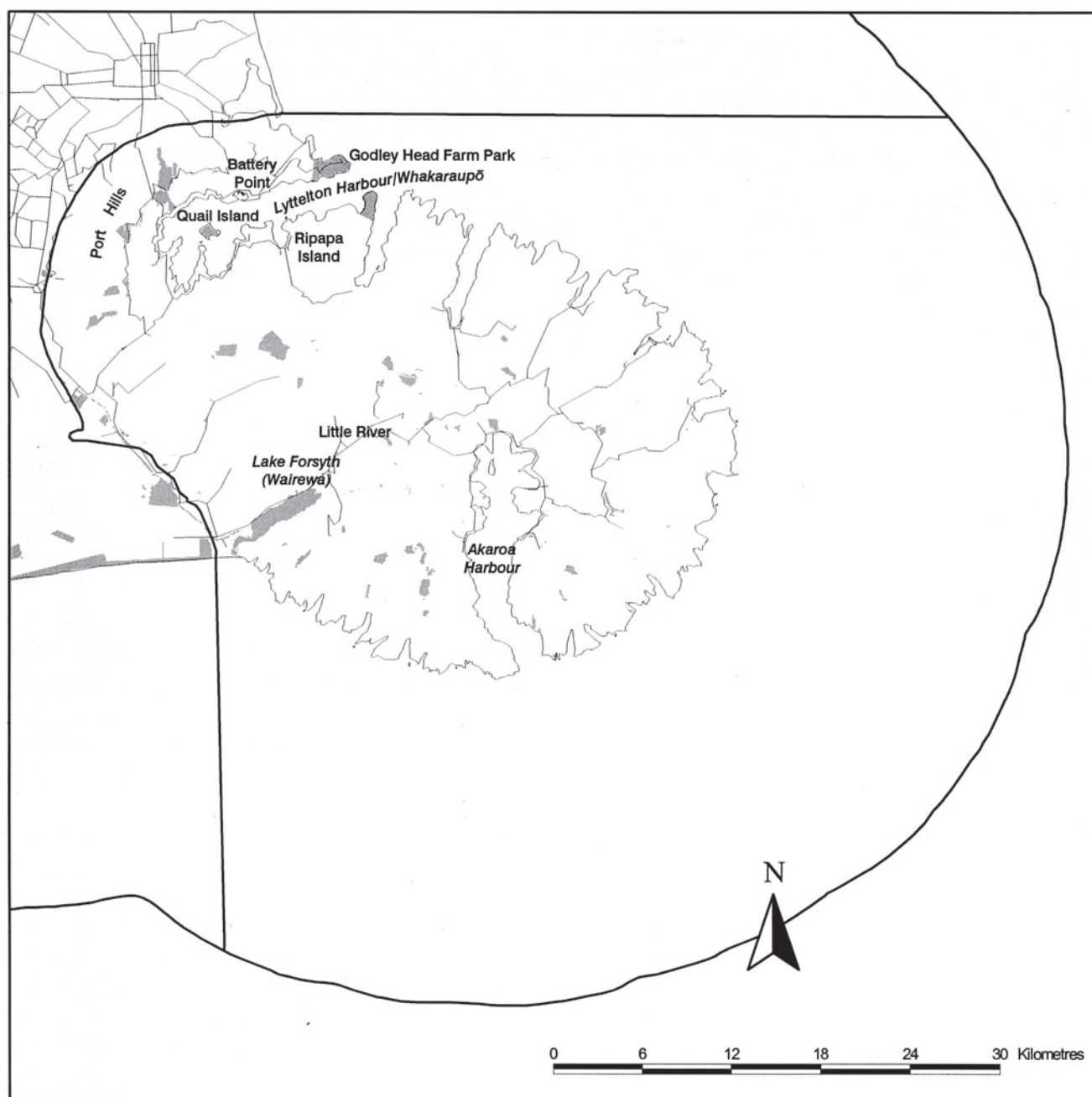


Table 5: Key Priorities for Lowry Unit

Name	Issue	Method	Result Sought	CMS Activity
4.3.1 Landscape and Historic Resource Management	Developments which detract from landscape character in the coastal environment, river gorges, limestone areas and historic places	1. RMA advocacy 2. Recording 3. Fencing 4. Stabilisation 5. Research	1. Hurunui District Council developed a protected landscape philosophy in the district plan 2. Weka Pass Historic Reserve fence maintained and drawings conserved	5.1.2 Treaty Partnership 5.2.2 Landscape 5.2.3 Land Ecosystems 5.2.7 Historic Resources
4.3.2 Ecosystem and Species	Inadequate knowledge and protection of the Lowry unit's ecological values.	1. Ecological survey 2. Reservation or covenant 3. RMA advocacy 4. Landholder liaison 5. Survey 6. Predator control	1. Full ecological survey coverage completed of significant sites and species 2. Significant sites and species protected and promoted	5.1.4 Communication and Liaison 5.2.3 Land Ecosystems 5.2.4 Freshwater Ecosystems 5.2.6 Indigenous Species
4.3.3 Motunau Island	This nature reserve is an important seabird habitat that is infested with boxthorn.	Physical, biological, and chemical control	Seabird populations enhanced by controlling boxthorn to levels that reduce the threat to seabirds	5.2.5 Marine Ecosystems 5.2.6 Indigenous Species 5.2.9 Plant Pests and Exotic Plants
4.3.4 Marine Reserves	Area contains a diverse range of marine ecosystems that could be considered for formal protection	1. Marine survey 2. Community liaison 3. Advice to groups undertaking marine reserve investigations	1. A sound knowledge of marine ecosystems is obtained 2. Marine ecosystems protected	5.1.2 Treaty Partnership 5.1.4 Communication and Liaison 5.2.5 Marine Ecosystems



Map 5 Banks Peninsula



- CMS Place Unit Boundaries
- Main roads
- Land managed by the Department



4.4 Banks Peninsula

Introduction

The character of Banks Peninsula is dominated by the distinctive volcanic geological features, radial drainage patterns, and a highly indented coastline dominated by the two major flooded valleys of Akaroa and Lyttelton Harbour. Many small remnants of the pre-1840 vegetation have survived timber milling and farm development.

Features and Issues

People Partnership

Banks Peninsula is a focal point of Ngāi Tahu settlement with four Papatipu Rūnanga (Kokourarata, Rapaki, Wairewa, and Ōnuku). Many sites of Māori history remain on the Peninsula and, while recognised in the district plan, few are formally protected. Local rūnanga are particularly concerned about wāhi tapu site protection, marine conservation and use issues. A Tōpuni was declared over Ripapa Island in recognition of its Ngāi Tahu values by the Ngāi Tahu Claims Settlement Act 1998. As a result of the Tōpuni the Minister of Conservation has agreed to a number of specific principles to guide the management of Ripapa Island.

With the exception of the major population centres (Lyttelton and the hill suburbs of Christchurch), the area is lightly populated, with small settlements concentrated in the valleys and harbour margins. The main economic activities are tourism and agriculture. The Port Hills are heavily used by Christchurch residents and tourists, and the wider area is a major holiday destination. Strong community support exists to retain natural and historic features and landscapes associated with the peninsula.

The Conservancy is involved with natural, historic and recreational issues in Banks Peninsula and will seek to maintain ongoing dialogue with a full range of community, recreation and interest groups, rūnanga, district and regional councils, and other organisations.

Heritage Conservation

A combination of volcanic activity, subsequent erosion, and deposition has resulted in a radial pattern of strongly dissected valleys leading into bays of varying form, typically with sandy beaches and small river estuaries. Tidal mudflats occur at the head of the harbours and the larger bays, and steep coastal cliffs are found at the outer margins of the peninsula.

Much of the original forest has been felled or burnt. Many of the indigenous forest remnants are highly modified with most of the bush having regenerated this century. The habitat provided by second growth hardwoods is very important for wildlife, including indigenous bird species, the jewelled gecko, and many invertebrate species. Beech forest has a limited range on the peninsula and adds to the diversity of habitat available for wildlife.

Botanical values are detailed in the Banks Peninsula protected natural areas report (Wilson, 1992). Areas of indigenous tussockland, open shrubland, fernland, and wetland sedges and rushes are still present. The wetlands that remain include the salt-marshes of Teddington and the freshwater and saline wetlands associated with Lake Forsyth/Wairewa. In some areas, tussocks are being pushed back by 'improved' pasture species whilst in others, pasture is reverting to indigenous species, gorse and broom.

Gorse has proven to be a nursery species that aids the regeneration of indigenous forest on the peninsula as is occurring at the private Hinewai Reserve.

Reserves are generally small, found at higher altitudes and are scattered. This 'stamp collecting' approach will not protect the landscape integrity of Banks Peninsula.

Additionally, many of the special plant and animal communities of Banks Peninsula are at risk from animal pest species, goats and possums in particular. The Department is committed to major control programmes for both species.

The coastal and marine environment contains a diversity of habitats, but little is known about the subtidal flora. The highly indented shoreline, featuring two large harbours of volcanic origin, is strongly influenced by weather patterns and the prevailing southerly current. While water quality is typically high, the waters are normally turbid with poor visibility. Marine protected area promotion, specifically with regard to possible marine reserve or other marine conservation options, remains contentious.

Hector's dolphin/upokohue is a focus for conservation effort and tourism interest. The Banks Peninsula marine mammal sanctuary is important for the long-term conservation of Hector's dolphin/upokohue. Less widely recognised are the large breeding colonies of spotted shag/kōautai, gulls/tarāpuka, and little blue penguins/kororā, and the isolated pairs of yellow-eyed penguins/hoiho.



Human History

The area has many significant Māori heritage sites. Earliest tribal habitations were by Rapuwai and Waitaha with settlements mainly located in coastal areas and the adjoining valley flats. These people dwindled in number and were absorbed into the Ngāti Mamoe who migrated south in the late sixteenth century. Ngāi Tahu followed early the next century and at their peak had a settlement in almost every bay. Fourteen pā sites provided protection. Raids led by Te Rauparaha broke these defences and culminated in the battles at Kaiapoi and Ōnawe in 1832. Considerable archaeological evidence of Māori occupation includes the pā sites of Ripapa Island, Ōnawe Peninsula and Ōruaka. All these sites are now managed by the Department or Te Rūnanga o Ngāi Tahu as historic reserves.

The first Europeans arrived to establish the whaling industry with shore stations, mainly along the southern bays. The French were the first Europeans to settle here, establishing the village of Akaroa, which retains a particular French character and charm today. Many of the historical sites of the peninsula are related to the sawmilling and farming activities of these early settlers. Later defence establishments added another dimension to the history of the peninsula. Ripapa Island is managed by the Department as a historic reserve. The Tōpuni over Ripapa Island is in recognition of particular Ngāi Tahu values relating to Ripapa, as set out in Appendix 4.

Recreation and Use

The peninsula is a popular destination for recreational activities and tourists. The historic Akaroa village is within an acceptable distance for day-trippers from Christchurch and the scenic drive is an added attraction. A number of tourist operations are now based on the peninsula. Tourism is strongly dependent on the high qualities of the natural and historic character of the peninsula.

Motor camps and baches around the peninsula boost population numbers markedly over long weekends and holiday periods. Recreational activities are predominantly located in coastal areas and include fishing, shellfish gathering, boating, swimming, rock climbing and walking. Short walks through the reserves, the walkway network and, more recently, longer tramps over private farmland with accommodation provided are popular.

Banks Peninsula has traditionally been the focus of much tramping activity. The Youth Hostel Association had its beginnings on the peninsula in 1931 as a network of farm hostels for walkers. With greater ease of transport, present use is mainly short (day) walks along the upland ridges. Facilities such as the Summit Ridge and Mount Herbert walkways, the Sign of the Packhorse hut and the Mount Herbert shelter are used regularly.

The primary recreational use issue is the provision and maintenance of public access. A legal road exists around almost all the land edge of Banks Peninsula, and down many valleys and ridges. Along the land edge the road is mostly unmarked and unformed. Numerous unlicensed structures have been placed on this legal road, particularly in Lyttelton and Akaroa harbours. A more sustainable approach for the coastline and upland areas is needed to ensure that natural values are protected and the public's right of access is enhanced while ensuring there is communication between parties and a 'good neighbour' philosophy is developed.



Areas Managed by the Department

The following areas managed by the Department are described in more detail in Volume 2, Schedule 2:

Name	Unit
Adderley Head Scenic Reserve	N36005
Akaroa Head Scenic Reserve	N37018
Armstrong Scenic Reserve	N37011
Carews Peak Scenic Reserve	N37009
Dan Rogers Creek Nature Reserve	N37017
Devils Gap Scenic Reserve	N37008
Ellangowan Scenic Reserve	N36047
Glenralloch Scenic Reserve	N36020
Godley Head Farm Park	N36001 (includes N36002, N36019)
Hay Scenic Reserve	N36025
Horomako Island Recreation Reserve	N36007
Hunter Native Forest Scenic Reserve	M36463
Kaituna Spur Scenic Reserve	N36031
Kaituna Valley Scenic Reserve	M36178
King Billy Island Scenic Reserve	M36088
Little Akaloa Scenic Reserve	N36010
Long Bay Scenic Reserve	N37016
Lyttelton (R101) Reserve	M36422 (also includes M36477)
Magnet Bay Scenic Reserve	N37007
Montgomery Park Scenic Reserve	N36115
Morice Settlement Scenic Reserve	N36016
Mount Sinclair Scenic Reserve	N36017 (includes N36021)
Mount Fitzgerald Scenic Reserve	N36015
Mount Herbert Scenic Reserve	N36030
Mount Pearce Scenic Reserve	N36142
Ōkuti Valley Scenic Reserve	N36139
Otepatotu Scenic Reserve	N36087 (includes N36088)
Pā Island	N36041
Palm Gully Scenic Reserve	N37020
Peraki Bay Scenic Reserve	N37012
Peraki Saddle Scenic Reserve	N37002
Pukerauaruhe Island Recreation Reserve	N36006
Quail Island Recreation Reserve	M36086
Ripapa Island Historic Reserve	N36003
Sign of the Packhorse Scenic Reserve	M36135 (includes M36139)
Tauhinu - Korokio Scenic Reserve	M36478
Te Oka Scenic Reserve	N36140
Tūtakahikura Scenic Reserve	N37019
Wainui Scenic Reserve	N36107
Wairewa (Lake Forsyth)	N36135 (includes M37017, M37018, M37019, M37020)
Whatarangi Scenic Reserve	N36024



Key Priorities

4.4.1 Landscape Protection and Enhancement

Issues

Banks Peninsula exhibits a distinctive character as a whole. It is diverse and sensitive to inappropriate development. A Summit Road Protection Act exists for the Port Hills but is limited in its effect. Many areas, particularly those on the skyline, are not formally recognised or protected.

Objective

- To identify, sustain and enhance the natural landscape and natural landscape values of Banks Peninsula.

Implementation

The Conservancy will:

1. Advocate that the Banks Peninsula, Selwyn and Christchurch City district plans contain methods, and encourage landowners to select methods, that maintain and enhance Banks Peninsula's natural character, in particular:
 - areas of significant remnant vegetation
 - the peninsula coastline
 - the summit ridge areas
 - the Port Hills
2. Encourage the Banks Peninsula District Council to adopt a protected landscape approach in its district plan by including methods that will maintain landscape integrity while managing land use change.

4.4.2 Ecosystems and Species Protection

Issues

The unit consists of three ecological districts, all of which have been formally surveyed (Wilson, 1992) under the PNA programme (see 5.5.4 Survey and Monitoring).

The current network of reserves and covenants on the peninsula is scattered and lacking in ecological representation. The long-term viability of the remaining flora and fauna is not assured due to the small size of some reserves, their isolation and lack of adequate buffer zones. There is potential for these reserves, and the ecological values of Banks Peninsula generally, to be enhanced through the processes of natural regeneration. This would result in better habitat linkages and reserve buffering.

Some of the existing reserves require significant rehabilitation and management but a lack of resources limits this work. There are other reserves that may be more appropriately managed by other agencies.

Much remnant indigenous bush on private land has no formal protection and its continued well-being is not guaranteed. These may provide opportunities to work with co-operative landholders to protect these areas.

Banks Peninsula is home to a high proportion of endemic local species, and many species reach their distributional limit here.

Ecosystem and species issues on Banks Peninsula include:

- yellow-eyed/hoiho and white-flipped penguins/kororā are continually threatened by predators, such as mustelids and cats, and by human disturbance
- Lake Forsyth, an important wintering-over habitat for the internal migration of the endangered southern crested grebe/kāmana, is sensitive to human impacts
- tidal flats are important as a food source for wading bird species, but vulnerable to pollutants and drainage activities
- there is continual loss of appropriate habitat for birds, invertebrates and reptiles
- indigenous fish may disappear from the peninsula streams through habitat modification such as the loss of riparian vegetation
- set net entanglements by Hector's dolphin/upokohue (see 4.4.5 Banks Peninsula Marine Mammal Sanctuary)



Objectives

- To identify the threatened plant and animal species of the Banks Peninsula unit.
- To use a range of effective methods to protect the indigenous biodiversity of the Banks Peninsula unit.
- To protect and enhance the viability of priority threatened species' populations and their habitat(s) in the Banks Peninsula unit.

Implementation

The Conservancy will:

1. Negotiate with landholders to protect significant areas of indigenous vegetation/wildlife habitat (see section 5.2.3 Land Ecosystems).
2. Undertake research/survey to clarify the distribution, status, habitat preferences and threats of the following species:
 - Invertebrates
 - Banks Peninsula tree weta
 - speargrass weevil
 - Akaroa weevil
 - Birds
 - kererū/native pigeon/kūkupa
 - white-flipped penguin/kororā
 - yellow-eyed penguin/hoiho
 - buff weka
 - southern crested grebe/kāmana
 - Fish
 - kōaro
 - banded kōkopu/para
 - Plants
 - Carmichaelia kirkii
 - Coprosma wallii
 - Leptinella nana
 - Melicytus 'Egmont'
 - Myosotis lytteltonensis
 - Olearia fragrantissima
 - Scenecio scaberulus
 - Tupeia antarctica
 - Marine Mammals
 - Hector's dolphin/upokohue
3. Advocate for the protection of indigenous biodiversity, including the habitat of threatened species and the healthy functioning of ecosystems.
4. Advocate effective means in Canterbury Regional Council and district council plans to avoid adverse effects to the habitat of threatened species for the following species:
 - Banks Peninsula tree weta
 - white-flipped penguin/kororā
 - yellow-eyed penguin/hoiho
 - kōaro
 - banded kokopu/para
5. Manipulate white-flipped penguin/kororā habitat, in co-operation with landholders, to enhance the species' population.
6. Seek formal habitat protection for the white-flipped penguin.
7. Undertake restoration for *Leptinella nana*.
8. Use education and advocacy to promote the protection of Hector's dolphin.



4.4.3 Port Hills and Lyttelton Harbour/Whakaraupō Protected Area

Issues

The Department currently manages a number of reserves and conservation areas along the Port Hills and within Lyttelton Harbour/Whakaraupō basin.

These reserves are near Christchurch and are heavily used. Few of these areas contain features that can be managed by the Department unaided. Examples are Godley Head Farm Park and Quail Island Recreation Reserve. Given the proximity of these reserves to the population of Christchurch, greater public contribution to their management should be encouraged. Those that are managed by the Conservancy are ideal sites for sponsorship and long-term restoration projects.

Objectives

- To rationalise the management of protected areas between Christchurch City Council, Banks Peninsula and Selwyn district councils and the Conservancy, to meet the requirements of the Reserves and Conservation Acts.
- To provide for the co-ordinated management and protection of publicly owned land on Banks Peninsula.
- To encourage greater community involvement in the management of Port Hills and Lyttelton Harbour/Whakaraupō basin protected areas.

Implementation

The Conservancy will:

1. Seek public input as classifications and management changes are suggested.
2. Gazette the appropriate classifications for reserves and conservation areas managed by the Department.
3. Investigate and implement rūnanga and community involvement in reserve management.
4. Investigate and, if sufficient public support is obtained, implement a long-term volunteer habitat restoration programme on Quail Island in partnership with Te Hapū o Ngāti Wheke (Rapaki Rūnanga) and the community.
5. Discuss with Te Rūnanga o Ngāi Tahu and Papatipu Rūnanga, and the Christchurch City and Banks Peninsula district councils a proposal to vest Port Hills and Lyttelton Harbour/Whakaraupō basin reserves in local bodies.
6. Consult with interest groups about the proposal.
7. Carry out any vesting and boundary rationalisations where agency agreement is reached.

4.4.4 Banks Peninsula Marine Reserve

Issues

There is growing recognition that there should be marine reserves established around Banks Peninsula. There are also wide-ranging views about what may or may not be appropriate for the peninsula. The Department has undertaken marine survey work in Akaroa Harbour and working groups have studied a range of options and proposed marine reserve areas.

Objectives

- To systematically identify and survey the significant marine values of Banks Peninsula.
- To provide procedural and policy advice to groups and organisations investigating or promoting marine reserves.
- To process applications for marine reserves.

Implementation

The Conservancy will:

1. Develop departmental priorities for marine protection on Banks Peninsula in co-operation with the local community.
2. Incorporate marine survey findings into the assessment of prospective sites for a marine protected area.
3. Provide procedural and policy advice to groups and organisations investigating or promoting marine reserves. This will involve consultation with Te Rūnanga o Ngāi Tahu and Papatipu Rūnanga and the local community.
4. Process applications for marine reserves.
5. Liaise with the Ministry of Fisheries over marine reserve applications.



6. Liaise with Te Rūnanga o Ngāi Tahu and Papatipu Rūnanga on marine reserve and taiāpure proposals.
7. Liaise with rūnanga about wāhi tapu areas.
8. Provide reports on survey progress to interested parties.
9. Provide progress reports to interest groups and individuals.

4.4.5 Banks Peninsula Marine Mammal Sanctuary

Issues

The waters off Banks Peninsula are one of the main breeding and resident areas for the threatened Hector's dolphin/upokohue. The marine mammal sanctuary was established in 1988 to protect dolphins from set netting.

Objectives

- To protect the Hector's dolphin population around Banks Peninsula.
- To liaise with fishers on the protection of dolphins

Implementation

The Conservancy will:

1. Continue monitoring to determine population trends.
2. Maintain contact with Papatipu Rūnanga, fishing groups, conservation associates and scientists on matters relating to the marine mammal sanctuary and other coastal issues.
3. Work closely with the Ministry of Fisheries (MFish) to investigate non-threatening fishing techniques.
4. Liaise with other Conservancies and Head Office to co-ordinate management and research associated with Hector's dolphin.
5. Support research related to ongoing management issues.
6. Consider applications and manage permits for marine mammal watching operations off Banks Peninsula in accordance with the Marine Mammals Protection Regulations 1992.
7. Encourage compliance with set netting controls of the Banks Peninsula Marine Mammal Sanctuary Regulations 1988.

4.4.6 Pest Control

Issues

Goats, possums, pigs, deer, mustelid, old man's beard, various weeds and cats all pose risks to nature conservation values on the peninsula. The Department needs to control plant and animal pests where there are statutory requirements and where indigenous biodiversity will most benefit.

Objective

- To protect natural values on land managed by the Department from the adverse effects of pests such as goats, possums and old man's beard.

Implementation

The Conservancy will:

1. Control feral goats and possums on lands managed by the Department to levels that do not significantly threaten natural values.
2. Advocate through the district plan process that standards be set for effective fencing for goat- farming areas.
3. Co-operate with the Ministry of Agriculture, the Canterbury Regional Council and adjoining landholders to control the level of possums and goats to maximise indigenous biodiversity and minimise incidents of bovine tuberculosis (TB).
4. Control old man's beard and other plant pests to levels where natural values are not threatened.
5. Co-ordinate plant and animal pest control with adjacent landholders where possible.



4.4.7 Māori And Early European Historic Sites

Issues

Historic sites are threatened by a lack of formal protection, human disturbance, and inappropriate activities. At present, the Conservancy and the New Zealand Historic Places Trust (NZHPT) lack the required information to enable the application of priorities for protection of Māori and early European historic sites on Banks Peninsula. There is a possible loss of historic assets due to lack of awareness of both their location and value. The Conservancy currently focuses its work on known sites managed by the Department. Outcomes of the Ngāi Tahu Claims Settlement Act (1998) are that Ōnawe Peninsula and Ōruaka Pā have passed to Te Rūnanga o Ngāi Tahu for ongoing management as historic reserves and Ripapa Island has a Tōpuni management overlay.

Objective

- To investigate and encourage the protection of historic resources and the heritage of the peninsula.
- To avoid harm to, or the diminishing of Ngāi Tahu values relating to the Tōpuni over Ripapa Island.

Implementation

The Conservancy will:

1. Take the actions specified in the *Deed of Settlement* (1997) at Attachement 12.143, to encourage respect for and accurate portrayal of Ngāi Tahu's association with Ripapa, and recognition of Ngāi Tahu's relationship with wāhi tapu and wāhi taonga, including archaeological sites.
2. Continue with progressive restoration of the fortifications and guns on Ripapa Island Historic Reserve, facilitate opportunities for public visits and ensure the history of the site is interpreted, consistent with Implementation 1 above.
3. Liaise with rūnanga and NZHPT to assist in and improve the protection and interpretation of Ōruaka Pa and Ōnawe Historic Reserves, now managed by Ngāi Tahu, and other pā sites on the Peninsula, in accordance with the outcomes of the *Deed of Settlement* (1997)
4. Liaise with NZHPT to complete a survey/inventory and assessment of priority for formal protection of historic places on the peninsula.
5. Prepare an inventory of sites on land managed by the Department that are associated with Māori occupation, whaling, flax milling, early French settlement, wider European settlement and farming activity, and the military to assess management requirements.
6. Continue close liaison with Papatipu Rūnanga and NZHPT to ensure culturally appropriate site management, restoration and interpretation.

4.4.8 Recreational Access to the Coast and Hills

Issues

Increasing numbers of visitors keen on walking are being attracted to the peninsula. Fundamental to maintaining the quality of these recreation experiences is the high quality land/seascapes, and the accessibility of these opportunities. Several private operators have taken the opportunity of establishing fee-paying walks across private land in the area. Along the coast, a legal unformed road exists that can provide for public access in some areas. It is often not physically defined, and there is a need to ensure populations of wildlife such as yellow-eyed penguins/hoiho and seals/kekeno are not disturbed. Appropriate public recreational access to the coastline needs to be maintained and enhanced.

Objectives

- To encourage improved legal foot access to and along the coastline, waterways and upland areas, including the summit ridge.
- To support recreational projects and activities that assist the conservation of significant natural, historic and cultural values of the peninsula.

Table 6: Key Priorities for Banks Peninsula Unit



Name	Issue	Method	Result Sought	CMS Activity
4.4.1 Landscape Protection and Enhancement	Protection of the integrity of the Banks Peninsula from inappropriate development	RMA advocacy for various methods	A protected landscape philosophy developed and included in the district plan by Banks Peninsula District Council	5.2.2 Landscape
4.4.2 Ecosystems and Species Protection	1. Ecosystem protection on Banks Peninsula in conjunction with landholders 2. What are the most important species on Banks Peninsula, and how can threats to their habitat be reduced?	1. Reservation 2. Covenant 3. RMA advocacy 4. Landholder liaison	1. Range of sites representing Banks Peninsula indigenous biodiversity adequately protected 2. Self-sustaining species populations	5.1.2 Treaty Partnership 5.1.4 Communication and Liaison 5.2.3 Land Ecosystems 5.2.5 Marine Ecosystems 5.2.6 Indigenous Species
1.4.3 Port Hills and Lyttelton Harbour/Whakaraupō Protected Area	Efficient and publicly supported Port Hills and Lyttelton Harbour/Whakaraupō protected area management	1. Vesting 2. Grant control and management 3. Weed/pest control 4. Fencing 5. Ecological restoration 6. Community involvement	1. Appropriate reserves vested in district councils. 2. Greater rūnanga and public involvement in management and restoration 3. Quail Island restoration	5.1.2 Treaty Partnership 5.1.3 Community Participation 5.1.4 Communication and Liaison 5.5.2 Statutory Land Management
4.4.4 Banks Peninsula Marine Reserve	The degradation of marine ecosystems through over- harvesting, inappropriate developments, and water pollution	1. Liaison with NGOs and MFish 2. Marine protected area strategy 3. Marine reserve establishment	Areas of ecological and recreational importance identified and protected	5.1.2 Treaty Partnership 5.1.4 Communication and Liaison 5.2.5 Marine Ecosystems
4.4.5 Banks Peninsula Marine Mammal Sanctuary	Decline in numbers of Hector's dolphin due to human factors, including by-catch in fishing nets	1. Review and implementation of marine mammal sanctuary. 2. Rūnanga and community participation. 3. Law enforcement and compliance. 4. Research into Hector's Dolphin population trends. 5. Research into fishing techniques that avoid or reduce dolphin by catch.	1. A viable population of Hector's dolphin maintained around Banks Peninsula 2. The public comply with the marine mammal sanctuary	5.1.2 Treaty Partnership 5.1.4 Communication and Liaison 5.2.6 Indigenous Species 5.5.5 Research
4.4.6 Pest Control	Possum and goat browse damage are major threats to Banks Peninsula ecosystems	Pest management	Indigenous communities protected through possum and goat control to prescribed levels	5.2.8 Animal Pests and Wild Animals
4.4.7 Māori and Early European Historic Sites	Historic sites are threatened by the lack of formal protection, and the effects of human disturbance and inappropriate activities	1. Rūnanga liaison 2. Signs/interpretation 3. By-laws 4. Enforcement	Sites regarded as important to Ngāi Tahu and Pākehā (e.g. Ripapa Island) are recognised and managed	5.1.2 Treaty Partnership 5.2.7 Historic Resources
4.4.8 Recreational Access to the Coast and Hills	Lack of suitable public access to and along some parts of the coast and hills	1. RMA advocacy 2. Survey 3. Signs/interpretation 4. Little River to Motukarara bike/walk trail	1. Defined/improved provision and awareness of appropriate public access opportunities 2. Recreational amenities protected	5.3.2 Recreation Opportunities



Implementation

The Conservancy will:

1. Support and encourage an appropriate network of foot tracks on Banks Peninsula, focusing on the summit areas and the coastline.
2. Improve awareness of the rights of landholders and track users through communication and education.
3. Encourage better utilisation of unformed legal roads, particularly those following the shoreline.
4. Negotiate walkways over private land where appropriate.
5. Advocate that the Banks Peninsula District Council and Christchurch City Council establish esplanade reserves along the coast to protect natural values, enhance appropriate recreational access and discourage inappropriate structures.
6. Encourage the formation of a trust to develop a walk/bike trail along the Motukarara-Little River railway route.

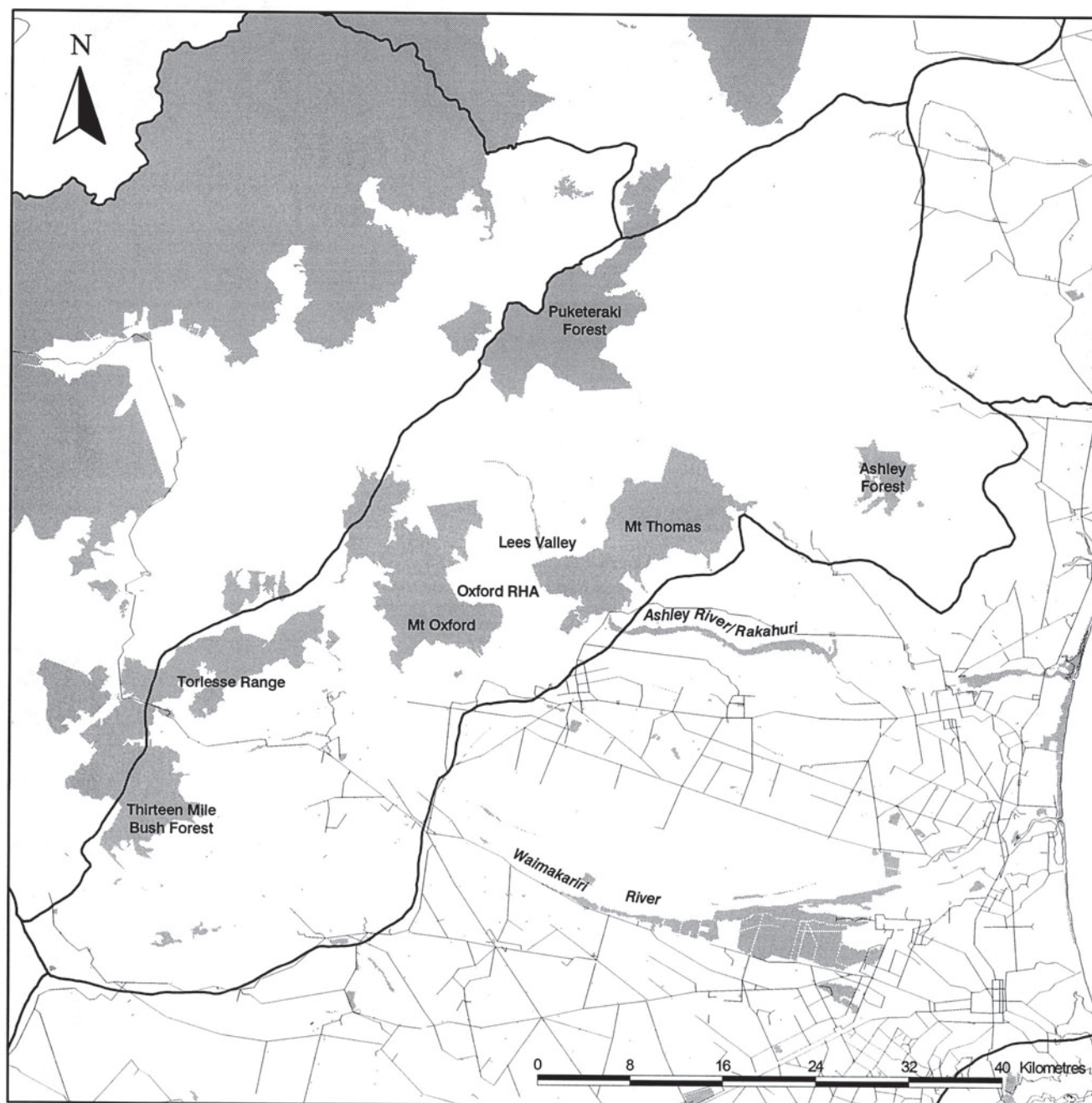
Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include:

- applying for marine reserves
- extensive animal and plant pest control
- extensive fencing of reserves



Map 6 Puketeraki



- CMS Place Unit Boundaries
- Main roads
- Land managed by the Department



4.5 Puketeraki

Introduction

The Puketeraki unit consists of the foothills and inland mountain ranges lying northwest of the Canterbury Plains between the Rakaia and Waipara rivers. Formed from sedimentary rock, they rise up to an altitude of 2000 metres and link the plains with the Southern Alps. The unit is bordered in the west by the Waimakariri, Porter, and Esk river catchments.

Features and Issues

People Partnership

Puketeraki is within the takiwā (area) of Te Ngāi Tuahuriri Rūnanga.

The rural farming environment of the foothills is sparsely populated. Close relationships have developed with the local people and this includes involvement with the Lees Valley Landcare Group. Afforestation is the most significant current land use change.

The Conservancy is involved with a range of natural, historic and recreational issues in the area, and will maintain ongoing consultation with district and regional councils and a range of commercial, community, recreation and interest groups.

Heritage Conservation

Uniform greywacke and argillite rocks were formed from sea-floor deposits and have been uplifted to their current height. The deeply incised river gorges of the Ashley/Rakahuri, Waimakariri and Rakaia rivers, which cut their way through these hills and ranges, are a distinctive feature of the area, as are the limestone outcrops of the upper Waipara River.

The indigenous vegetation is quite extensive, being predominantly black beech/tāwhairāunui into low altitudes grading into mountain beech/tāwai above 600 metres. At low altitudes there is also a scattering of podocarps and broad-leaved hardwoods. The more commonly occurring podocarps are matāi and kahikatea with rimu and miro also present to a lesser extent. Southern rātā is found in the Mount Thomas/Oxford area. Kererū, kea, kākā and kākāriki are present in Oxford forests, as are indigenous snails. Rare indigenous orchids grow in parts of the area. Red beech/tāwai and kāmahi are also found here at their eastern limit.

Extensive areas of mānuka and kānuka occur. Short and tall tussockland is present; silver/wi and fescue tussock are found at low altitudes, as are lesser amounts of red tussock, while *Chionochloa macra* is characteristic of higher altitudes.

The headwaters of the Ashley/Rakahuri and Selwyn/Waikirikiriri rivers provide important fish and wildlife habitat.

Human History

Māori from the Kaiapoi Pā and Tuahiwi kāinga frequently travelled through this area in search of food, especially the kiore, or indigenous rat. From the swamps that extended into the lowlands, Māori also harvested flax/harakeke and raupō. Cooking places paved with small stones have been uncovered near the edge of forests and beside streams. Several roughly defined tracks that were regularly used routes into the hills have been named 'Māori tracks', including the Blowhard Track.

Runholders established extensive farms and preceded the commercial sawmilling industry on which the district was founded. The last mills ceased operation in about 1912 leaving behind such relics as Rydes tramway.

Recreation and Use

One of the highest recreational uses of the area is by day visitors who use the area in a relatively passive manner, with a picnic or short walk. Another large group of users are those who stay longer periods by camping or using one of the nine backcountry huts. The backcountry facilities also receive high use by recreational hunters who come to enjoy the opportunities provided by the Oxford Recreational Hunting Area (RHA).

The major issue concerning recreation and use is the Department's attempt to provide the most effective mix of facilities for visitors. In order to achieve this, more resources are being directed to road-end and day-walk facilities. There are also recreational use conflicts, especially between mountain-bikers and trampers.



Areas Managed by the Department

The following areas managed by the Department are described in more detail in Volume 2, Schedule 2:

Name	Unit
Ashley Forest	M34017
Hoods Bush Scenic Reserve	L35140
Lords Bush Scenic Reserve	L35243
Mount Thomas Forest	L34038
Oxford Conservation Area	L34029
Puketeraki Forest	L33009
Rockwood Conservation Area	K35028
The Den Retirement Area	L33023
Thirteen Mile Bush Forest	K35018
Torlesse Forest	L34018
View Hill Scenic Reserve	L35003

Key Priorities

4.5.1 Ecosystems and Species

Issues

The unit consists of four ecological districts, none of which has been formally surveyed under the PNA programme (see 5.5.4 Survey and Monitoring).

While progress has been made in adding to the network of protected areas, the full range of types of vegetation and natural landscape types is not yet covered. Many areas outside land managed by the Department need greater recognition and protection.

Tenure review of pastoral leases (see 5.2.3 Land Ecosystems) is an active process in this unit, providing opportunities for natural values protection.

The area is significant for being the easternmost distribution of kiwi in Canterbury.

Objectives

- To identify the significant indigenous vegetation and threatened animal and plant species of the Puketeraki unit.
- To use a range of effective methods to protect the indigenous biodiversity of the Puketeraki unit.
- To protect and enhance the viability of priority threatened species' populations and their habitat(s) in the Puketeraki unit.

Implementation

The Conservancy will:

1. Survey the ecological values of the following priority ecological districts (see 5.5.4 Survey and Monitoring):
 - Torlesse
 - Whitecliffs
 - Ashley
 - Oxford
2. Negotiate with landholders to protect significant areas of indigenous vegetation/wildlife habitat, including through tenure review processes (see 5.2.3 Land Ecosystems).
3. Undertake research/survey to clarify the distribution, status, habitat preferences and threats of the great-spotted kiwi/roroa.
4. Advocate for the protection of indigenous biodiversity, including the habitat of threatened species and the healthy functioning of ecosystems.



4.5.2 Oxford Recreational Hunting Area

Issues

The Department has an obligation under the Wild Animal Control Act to manage recreational hunting areas (RHAs). Currently there is little or no monitoring of their natural values. They need to be managed and monitored according to ecological standards.

Objective

- To foster appropriate recreational hunting that best protects indigenous natural resources.

Implementation

The Conservancy will:

1. Define clear ecological objectives for desirable vegetation conditions, given the presence of deer; and evaluate options for effective vegetation monitoring.
2. Determine a management regime that will best ensure these ecological objectives are sustained.
3. Encourage hunting in the area that will ensure that ecological objectives are sustained.
4. Monitor recreational hunting returns.

4.5.3 Recreation

Issues

The North Canterbury foothills area is heavily utilised by Christchurch and other Canterbury residents. The Conservancy encourages a mix of recreational opportunities for the various users of the land it manages. Mountain-biking is a popular recreational pursuit in these forests but it conflicts with more passive recreational activities and has greater potential for adverse effects. Public foot access to land managed by the Department from some road-ends and via unformed legal road is unrestricted, although access via adjoining land (mostly administered by a private forest company) requires permission.

Objectives

- To maintain a network of tracks, bridges and huts in the Puketeraki foothills.
- To minimise conflict between different recreational users on lands managed by the Department.
- To improve public access to lands managed by the Department.
- To minimise the problems experienced by private landholders who allow the public to reach land managed by the Department by travelling through their property.

Implementation

The Conservancy will:

1. Liaise with recreational user groups and review the mix of activities provided.
2. Develop access from road-ends to the foothills conservation areas for a range of activities, including access to the major track systems, opportunities for picnicking, shorter walks and informal short-stay camping. Such areas include Eyre River, View Hill, Coopers Creek, Glentui and Wooded Gully road-ends.
3. Assess attitudes towards mountain-bikers and investigate options for minimising conflicts.
4. Investigate further options for the improvement of foot access into conservation areas in full co-operation with adjoining landholders.
5. Liaise with private landholders who allow the public to reach lands managed by the Department by travelling through their property, and implement agreed methods to avoid, remedy or mitigate the problems of providing access.

4.5.4 Foothills Conservation Park

Issues

Foothill forests and grasslands, particularly in the Torlesse area, have a low public profile but high recreational usage and high natural values. Raising the status of these lands would improve the public understanding of their conservation values and provide a defined management focus. Areas of high conservation value will be added to land managed by the Department through the tenure review process.



Objective

- To improve and rationalise the protected status of land managed by the Department in the Puketeraki unit.

Implementation

The Conservancy will:

- Work through the following process (in order), in consultation with Te Ngāi Tuahuriri Rūnanga:
 - take account of the effects of tenure review on future land status
 - prepare a discussion document outlining the protected area options for the land managed by the Department within all or part of the Puketeraki, Ōkuku, Torlesse and Big Ben Ranges.
 - invite public submissions and provide for oral hearings on the discussion document in accordance with section 49 of the Conservation Act
 - forward a recommendation and summary of submissions to the Minister
 - implement and gazette action, as required by decisions made by the Minister.
- Where the North Canterbury Conservation Board and Department agree, recommend to the Minister that such land become a Torlesse Conservation Park or a wider Foothills Conservation Park.

Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include:

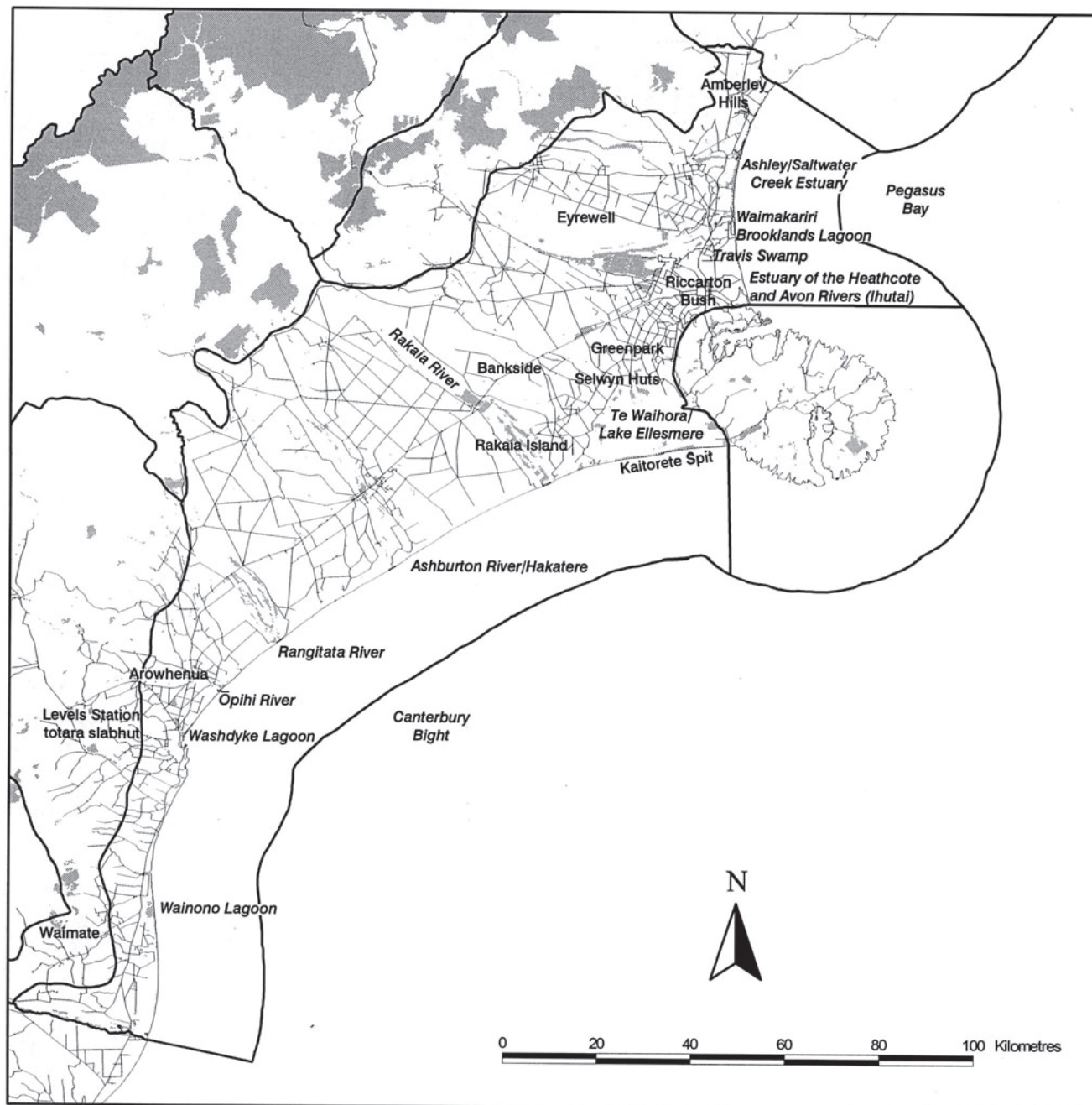
- gorse and broom eradication
- deer density and ecological impact monitoring
- new departmental walkways
- new departmental huts
- management of low-priority recreational facilities

Table 7: Key Priorities for Puketeraki Unit

Name	Issue	Method	Result Sought	CMS Activity
4.5.1 Ecosystems and Species	Most of the area has not been ecologically surveyed	1. Ecological survey 2. Reservation 3. Covenant 4. RMA advocacy 5. Landholder liaison 6. Tenure Review	1. Area completely surveyed and important sites protected 2. Self-sustaining species populations	5.1.4 Communication and Liaison 5.2.3 Land Ecosystems 5.2.4 Freshwater Ecosystems 5.5.4 Survey and Monitoring
4.5.2 Oxford Recreational Hunting Area	Lack of ecological objectives for RHA management	1. Monitoring 2. Hunter participation	Recreational hunters contributing to maintaining a desired ecological condition	5.2.8 Animal Pests and Wild Animals 5.3.2 Recreation Opportunities
4.5.3 Recreation	1. Demand for front-country facilities 2. Mountain-biking provisions, conflict with other users, and already affected sites 3. Access to conservation areas	1. Facility provision 2. Define mountain-bike tracks 3. By-laws and regulations 4. Adjoining landholder liaison	Varied facilities for recreational pursuits whilst minimising conflicts with other users and the site	5.1.4 Communication and Liaison 5.3.2 Recreation Opportunities 5.3.3 Recreation Facilities 5.3.4 Visitor Impacts and Safety
4.5.4 Foothills Conservation Park	Foothill forests and grasslands have high use but a low public profile	1. Investigate and, if supported, gazette a Torlesse Conservation Park 2. Investigate and, if supported, gazette a Foothills Conservation Park 3. Tenure review	Departmental areas managed as one unit with a high public recognition of the park	5.1.2 Treaty Partnership 5.1.4 Communication and Liaison 5.5.2 Statutory Land Management



Map 7 Plains



- CMS Place Unit Boundaries
- Main roads
- Land managed by the Department



4.6 Plains

Introduction

The plains unit extends some 60 kilometres from the inland foothills to the great sweep of the South Canterbury Bight and Pegasus Bay. In the north the area is bordered by the Amberley and Motunau coastal hills, and in the south by the Hunter Hills and the lower Waitaki River.

Features and Issues

People Partnership

The plains are very much the stronghold and cradle of Ngāi Tahu influence within the central South Island. In particular, Te Waihora/Lake Ellesmere remains a focus for settlement and for the gathering of traditional mahinga kai.

Four Papatipu Rūnanga are located within the unit:

north of Ashburton River/Hakaterere :	Te Ngāi Tuahuriri Rūnanga
south of Ashburton River/Hakaterere:	Te Rūnanga o Arowhenua
centred on Te Waihora/Lake Ellesmere:	Te Taumutu Rūnanga
centred around Waitaki/Morven:	Te Rūnanga Waihao

The majority of Canterbury's population live on the plains in the major urban centres of Christchurch, Ashburton and Timaru. Ironically, while most Canterbury residents live on the plains, few are aware of the dramatic effect development has had on the indigenous plant communities, wetlands and coastal estuaries of the area. The Canterbury plains are among the most modified areas in New Zealand.

Heritage Conservation

The Canterbury plains are comprised of glacial outwash and alluvial gravel fans, with a top layer of wind blown loess from earlier glacial periods. As they are dominated by farmland, roads and towns, the few remnants of indigenous vegetation are extremely significant.

Braided rivers bisect the plains, linking the inland mountains and the sea. These rivers are important for migratory fish species, and are used by a diversity of indigenous birds, including threatened species such as the wrybill plover/ngutu pare and banded dotterel/pohowera. They are also internationally significant because of their braided nature. The ecological importance of these rivers is illustrated by the Rakaia National Water Conservation Order (NWCO). Natural values of these braided rivers are threatened by exotic plants and animal pests. The threatened Canterbury mudfish/kōwaro lives in slow-moving water bodies on the Canterbury plains.

The coastal fringe retains important natural values. The beaches retain an essentially natural character, and have supported important populations of indigenous plants and animals. The beaches north of Banks Peninsula are largely sandy, while those to the south are generally gravel.

Offshore marine ecosystems are not well known. At Timaru, the coastal reef system is important, being the only one of its type between Banks Peninsula and the Waitaki River.

Four major estuarine habitats occur along the coast – the Ashley/Saltwater Creek, Brooklands Lagoon, the Estuary of the Heathcote and Avon rivers/Ihutai, and the Ōpihi Lagoon. These areas are extremely important ecologically, providing habitat for large numbers of indigenous plants and animals, and fulfilling a nursery function as a link between freshwater and marine environments.

Coastal lakes and wetlands on the plains are also internationally significant, particularly Te Waihora/Lake Ellesmere.

Te Waihora/Lake Ellesmere is subject to a National Water Conservation Order (NWCO) to help protect its ecological functioning. It is a dominant feature of the plains. It is a very large brackish water body featuring a range of outstanding conservation features. Within the Te Waihora/Lake Ellesmere system, 158 bird species, including 133 indigenous species, have been recorded. There is also a number of rare plants in the area (for example, *Spiranthes sinensis* and *Baumea rubiginosa*) and those which reach distributional limits, such as *Dodonea viscosa*.

The lake and its values are of immense importance to Ngāi Tahu and Pākehā alike. There is considerable debate about the appropriate management regime for the lake.

The lake is separated from the sea by a beach barrier, known as Kaitorete Spit. The spit is the largest landform of its type in New Zealand with substantial remaining indigenous vegetation cover in a largely



natural condition. Sand dunes on the spit provide habitat for one of the three remaining populations of pingao, a sandbinder sedge, *Desmoschoenus spiralis*. The spit also supports interesting indigenous shrub communities and grasslands, such as *Muelenbeckia astonii* and *Austrofestuca littoralis* and is habitat for some endemic skinks and flightless moths.

At the mouths of most rivers, lagoon backwaters provide further habitat for birds, invertebrates and fish. The collective value of these coastal wetlands for migratory species is extremely important. Within Christchurch, Travis Swamp is the last remnant of a whole wetland complex that once existed where the city is now located.

Elsewhere on the plains, indigenous vegetation distribution has been reduced to small, isolated and scattered remnants. Some plant communities are protected by reservation but they are relatively small and do not fully represent Canterbury's indigenous biodiversity. They include Eyrewell (kānuka), Bankside (kānuka), and Riccarton Bush (podocarp). Rakaia Island supports a large area of kōwhai, with pittosporum, mixed shrubland, ferns and many other indigenous plants. Other remnants occur along roadsides, riverbanks, water races (Given *et al.*, 1994) and on farmland. A reconnaissance ecological survey has been undertaken on the plains, and provides information about the location and composition of many of the fragments of indigenous vegetation remaining (report in preparation, DOC).

Human History

All the wetlands, but particularly Te Waihora/Lake Ellesmere, provided abundant sources of mahinga kai for Māori in the past.

The Department has a limited role in historic building conservation in the urban areas, but retains an interest in the Canterbury Provincial Buildings, Cranmer Court and the Waimate Courthouse. Many of the historic features remaining on the plains are associated with agricultural settlement and industry, such as the Levels Station Tōtara Slab Hut and the Cuddy at Te Waimate.

Recreation and Use

Te Waihora/Lake Ellesmere is New Zealand's most popular recreational duck-shooting area. Shooting and recreational fishing for indigenous species, whitebait and eel, and for introduced species such as trout and salmon, occur on many other wetlands and rivers. Te Waihora/Lake Ellesmere and Wainono Lagoon are very important mahinga kai for local rūnanga.

Pegasus Bay provides extensive beaches in the north while Caroline Bay is the only relatively safe swimming place south of Banks Peninsula. Swimming and boating opportunities are available at most estuaries and lagoons.

The Waimakariri, Rakaia, Rangitata and Waitaki braided rivers are nationally significant for their salmon fishing and jet-boating opportunities, as well as for their wildlife features. The Ashley/Rakahuri, Waimakariri, Rangitata and Waitaki river-mouths, Saltwater Creek and the Estuary of the Heathcote and Avon rivers/Ihutai are regionally important whitebaiting areas.

Ongoing issues are the maintenance of recreational access to rivers and the coast and the provision of adequate flows in the main rivers and streams to provide life supporting capacity for the aquatic ecosystems, wildlife, fish, and invertebrates that depend on adequate flows to live.



Areas Managed by the Department

The following areas managed by the Department are described in more detail in Volume 2; Schedule 2:

Name	Unit
Bankside Scientific Reserve	L36193
Chapmans Creek Beech Forest, Mount Somers	K36020
Cruickshanks Pond Wildlife Management Reserve	J40033
Eyrewell Scientific Reserve	L35092
German Creek Wildlife Management Reserve	J38124
Ghost Stream Beech Forest, Mount Somers	K36021
Harts Creek Wildlife Management Reserve	M36190 (includes M36502, M36503)
Jeanie Collier Grave-site	J39115
Kaitorete Spit Conservation Area	M37031
Kaitorete Spit Scientific Reserve and Conservation Areas	M37011, M37014 (includes M37009, M37012, M37023, M37024, M37026, M37028, M37029, M37030)
Lakeside Wildlife Management Reserve	M36192
Lower Rangitata River channels	K38004
Lower Waitaki	
Lower Waitaki Conservation Area	
McQueens Lagoon	M36148 (also includes M36149, M36150)
Milford Lagoon and lower Orakipaoa Creek	K38113
Normanby Wetland Conservation Area	J39131
Ōtūkaikino Wildlife Management Reserve [Wilson's Swamp]	M35813
part Ashley/Rakahuri Riverbed	M34030
part Rakaia Riverbed	L36188 (includes L36182
part Rakaia Riverbed and island	L36208 (includes L37014, L37010, L37019
part Rakaia Riverbed, near State Highway One	L36171 (includes L36182
Rangitata Riverbed, Ealing	K37273 (includes K37328
Selwyn Wildlife Management Reserve	M36186 (includes M36189
Spider Lagoon	K38068
Transit of Venus Historic Reserve	M36043
Waihao Box Wildlife Management Reserve	J40036
Waihora Scientific Reserve	M37010
Wainono Lagoon	J40014
Wards Wildlife Management Reserve	M36470
Washdyke Lagoon Wildlife Refuge	J39 003
Williams Wildlife Management Reserve	M36471
Yarrs Flat Wildlife Management Reserve	M36183



Key Priorities

4.6.1 Ecosystems and Species

Issues

The unit consists of five ecological districts (Low Plains, High Plains, Ellesmere, Makikihi and Glenavy), the first two of which have been reconnaissance surveyed (report in preparation, DOC). Ellesmere has substantial existing ecological reports.

The plains constitute perhaps the most intensively modified surface encountered within the Conservancy. Only small fragments of indigenous vegetation remain. Consequently, much of the original biota is no longer represented or is relegated to a few precarious sites in areas such as riverbeds and roads. They survive more by luck than conscious management.

Braided rivers are a special feature of the plains and are nationally significant for their indigenous fauna and flora. They are best known for their distinctive bird life. The protection of the riverbed habitats also benefits the nationally important recreational fisheries. Horseshoe Lagoon is the only remaining habitat for the giant kōkopu/taiwharu in Canterbury. Canterbury mudfish/kōwaro live primarily in the swamps and creeks of the Canterbury plains.

Objectives

- To identify the significant indigenous vegetation and threatened plant and animal species of the Plains unit.
- To use a range of effective methods to protect the indigenous biodiversity of the Plains unit.
- To protect and enhance the viability of priority threatened species populations and their habitat(s) in the Plains unit.
- To advocate for the provision of linkages and corridors between threatened communities as a means of strengthening their viability and long-term survival.

Implementation

The Conservancy will:

1. Recognise the need to survey the ecological values of the Makikihi and Glenavy ecological districts.
2. Encourage Transit New Zealand, Canterbury Regional Council and district councils to avoid adverse effects on significant remnant areas of indigenous vegetation.
3. Ensure an adequate database of all relevant species and habitats is maintained in order to provide the regional council with information that ensures river works are timed and designed to minimise wildlife disturbance, and that they mimic natural riverbed processes.
4. Advocate for protection of in-stream values, habitat and ecological processes, and to maintain the life-supporting capacities of braided rivers and other waterways. Where abstraction is considered acceptable, advocacy will include requesting minimum flow criteria.
5. Encourage community and district council initiatives to maintain and enhance remnant indigenous ecosystems, and to provide for linkages between these remnants.
6. Promote and utilise the maps, *Indigenous Ecosystems of Otautahi/Cristchurch* (Lucas Associates, 1995–1997).
7. Undertake research and/or surveys to clarify the distribution, status, habitat preferences and threats to the following species in the unit:
 - Birds
 - Wrybill/ngutu-pare
 - Black-fronted tern/tarapirohe
 - Bats
 - Long-tailed bat/pekapeka
 - Fish
 - Canterbury mudfish/kōwaro
 - Plants
 - Shrubby tororara
 - Melicytus 'Egmont'
 - Myosotis lytteltonensis
 - Coprosma wallii
 - Tupeia antarctica



8. Advocate for the protection of indigenous biodiversity including the habitat of threatened species and the healthy functioning of ecosystems.
9. Undertake trend counts of indigenous wildlife on Te Waihora/Ellesmere, in conjunction with associates.
10. Advocate effective means to avoid adverse effects to the habitat of threatened species in Canterbury Regional Council and district council plans for the following species in the unit:
Canterbury mudfish/kōwaro
Wrybill/ngutu-pare
black-fronted tern/tarapirohe
11. Undertake plant and animal pest control to reduce their threat to shrubby tororara on Kaitorete Spit.
12. Seek formal habitat protection for Canterbury mudfish/kōwaro and giant kōkopu/taiwharu.
13. Assist in the restoration of key areas of indigenous habitat, such as Ōtūkaikino (Wilson's Swamp).
14. Promote the protection of indigenous vegetation fragments identified in the reconnaissance surveys (Given *et al.*, 1994; *Reconnaissance survey*, in preparation).

4.6.2 Te Waihora/Lake Ellesmere

Issue

Te Waihora/Lake Ellesmere is the most important wetland habitat of its type in New Zealand. To Ngāi Tahu it represents a major mahinga kai and an important source of mana. To Pākehā it has a range of values and uses: commercial fishing and farming, which dominate productive use; bird watching; recreational fishing, boating and duck hunting, which dominate recreational activity. The lake also provides essential habitats for a large range of bird, plant and invertebrate species. The lake has high nutrient levels, and its water levels are highly managed. Nevertheless, improved water level management in particular would benefit the lake ecosystem as would improved management of the surrounding lake edge wetland margins. The Department considers that the existing water conservation order can, perhaps with some modification, be used to improve this water management regime.

There is a statutory requirement by the New Zealand Coastal Policy Statement 1994 (NZCPS) to plan for the inland migration of natural features (such as coastal lagoons like Te Waihora) resulting from such factors as sea-level rise. In its advocacy role, the Department should work with the Canterbury Regional Council to promote higher quality inflows into the lake.

The Department manages a considerable area of lake margin. Some of this land is not wetland or needed as a buffer, and land tenure needs to be rationalised so that the Department is only managing areas important for conservation. The issue is how the Department should divest itself of this responsibility while not compromising natural and historic resources, both now and into the future.

Te Waihora/Lake Ellesmere was subject to a claim to the Waitangi Tribunal. The Waitangi Tribunal recommended that ownership of Te Waihora be passed to Ngāi Tahu and that the tribe have greater involvement in the management of the lake and lake edge margins. These recommendations have been given practical effect in *The Deed of Settlement* (1997) and the Ngāi Tahu Claims Settlement Act 1998.

Te Waihora/Lake Ellesmere has long been recognised as meeting the nomination criteria for the IUCN: Wetland of International Importance status (see e.g. Palmer, 1982). The Department has, however, delayed nomination pending the resolution of the Ngāi Tahu claim.

The Department is clear that any actions it would envisage taking for the conservation of Te Waihora/Lake Ellesmere need to be done in harmony with Ngāi Tahu aspirations and with a clear conservation focus. This will primarily occur through the Settlement Act's required joint Te Rūnanga o Ngāi Tahu and Department, Te Waihora Management Plan.

Objectives

- To enhance the natural values and process of Te Waihora/Lake Ellesmere lake ecosystem.
- To assist with the implementation of the Ngāi Tahu Claims Settlement Act in relation to Te Waihora/Lake Ellesmere.
- To monitor natural trends in Te Waihora/Lake Ellesmere in consultation and participation with Te Rūnanga o Ngāi Tahu, with a view to identifying and resolving any management issues.
- To liaise with Te Rūnanga o Ngāi Tahu, the Canterbury Regional Council, adjacent landholders and other affected parties to improve and implement the conditions of the Lake Ellesmere Water Conservation Order.
- To secure a margin of protected wetland surrounding the lakeshore by trading arable land managed by



the Department for privately owned wetlands, and using other protection mechanisms.

- To seek recognition of the international importance of Te Waihora/Lake Ellesmere and its values.

Implementation

The Conservancy will:

1. Implement the outcomes of the Ngāi Tahu Claims Settlement Act 1998 by, in particular, jointly preparing a management plan for the Te Rūnanga o Ngāi Tahu owned and Department managed lands at Te Waihora.
2. Establish a joint management and advocacy approach with Ngāi Tahu. This includes a joint approach to the following implementation methods.
3. Undertake trend counts of indigenous wildlife.
4. Monitor the condition of vegetation and habitats around the lake and seek or implement controls where adverse effects occur (such as inappropriate vehicle use).
5. Seek improved water level management for conservation under the terms and any revised conditions of the Lake Ellesmere Water Conservation Order.
6. Extend lake margin protection through rationalising land tenure by:
 - identifying land managed by the Department with low natural, historic or recreational values
 - identifying areas of private land that, if protected, would add to the natural value of the lake and its wetland margins
 - negotiating land transfer, covenants or other protective agreements with private landholders
7. Continue to seek protection of lake margin wetlands through landowner negotiation and RMA advocacy.
8. Encourage measures to improve the water quality of the lake.
9. Seek IUCN Wetlands of International Importance status, subject to the agreement of Te Rūnanga o Ngāi Tahu, (see *Guidelines for nominating wetlands...* 1991).
10. Support ecological restoration of indigenous biodiversity and mahinga kai around the lake.

4.6.3 Other Coastal Lagoons and Estuaries

Issue

Coastal estuary and lagoon wetlands are of critical nature conservation importance. They provide a link between freshwater and marine environments that is essential for migrating fish, and they have national habitat value as a series of links along the coast for migrating birds. Much of their margins have been drained or altered by adjoining development. They were extensively used in the past by Ngāi Tahu as mahinga kai sources, and Ngāi Tahu wish to sustain and enhance this use into the future.

Important wetlands managed at least in part by the Department are Ashley-Saltwater, Washdyke/Waitarakao, Ōpihi and Wainono. A further important wetland, Coopers Lagoon/Muriwai transferred to Te Rūnanga o Ngāi Tahu as part of the Ngāi Tahu claims settlement.

The Estuary of the Heathcote and Avon Rivers/Ihutai and adjoining oxidation ponds support bird numbers sufficient to justify the IUCN Wetland of International Importance (WII) status, although this is partly due to the artificially high nutrient levels and their effects on the food-chain. These levels and bird numbers may decrease in the future as the health of the estuary improves.

Objectives

- To maintain or enhance the natural values of coastal lagoons and estuaries on land managed by the Department.
- To encourage the enhancement of natural values of coastal lagoons and estuaries.

Implementation

The Conservancy will:

1. Negotiate with farmers, relevant rūnanga, local interest groups, Fish and Game Councils, and regional councils to establish appropriate inflows and water levels for Wainono and Washdyke/Waitarakao to maintain their life-supporting capacities and, in particular, their shoreline wetlands.
2. Develop and implement indigenous revegetation programmes (for example, raupō plantings) for Wainono Lagoon in conjunction with Te Rūnanga o Waihao
3. Survey and gather information on the wetlands and waterways to determine the extent and status of wetland values, shoreline vegetation and indigenous fish.



4. Monitor habitat indicators such as vegetation condition to ensure wetland values are not deteriorating.
5. Process any Heathcote/Avon/Ihutai WII applications submitted and, if approved, keep the WII status under review in light of habitat changes.
6. Protect and enhance the value of these areas for mahinga kai.

4.6.4 Kaitorete Spit

Issue

Kaitorete Spit is a unique resource for its geomorphological, cultural and natural elements. Each of these attributes is threatened by human activities and adverse effects, from which protection is required.

Objective

- To protect and enhance the cultural and natural values of Kaitorete Spit.

Implementation

The Conservancy will:

1. Further identify and protect sites of cultural and natural value, such as archaeological sites and invertebrate habitats and raise awareness of these.
2. Continue marram grass control and investigate boneseed, as a control issue, within the pingao communities.
3. Manage the area to protect natural sand dune processes and ecosystems.
4. Enhance pingao and associated plant communities and undertake other conservation management in conjunction with local rūnanga.
5. Monitor animal and plant communities.

4.6.5 Canterbury Mudfish/Kōwaro

Issue

The long-term survival of the endemic Canterbury mudfish/kōwaro is threatened by the loss and modification of wetland habitats.

Objectives

- To identify existing habitats and populations of the Canterbury mudfish.
- To increase the number of protected habitats for mudfish and consider captive breeding programmes.

Implementation

The Conservancy will:

1. Identify, protect and restore suitable mudfish habitats with the support of relevant landholders.
2. Survey to determine Canterbury mudfish distribution.
3. Establish captive mudfish populations for conservation purposes.
4. Monitor the impacts of drain clearance on mudfish habitat, and recommend techniques that avoid, remedy or mitigate adverse effects on Canterbury mudfish to farmers, district councils, and the Canterbury Regional Council.
5. Avoid the introduction of aquatic life that could threaten mudfish populations.
6. Ensure effective information-sharing between Crown research institutes, other agencies and the Department.

Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include:

- follow-ups to the plains reconnaissance survey (to encourage site protection).
- purchasing, covenanting or reaching management agreements on all indigenous remnants.
- monitoring of all protected species and habitat enhancements.
- a census of birds on wetland areas such as the Estuary, Travis Swamp and Brooklands Lagoon in conjunction with associates.

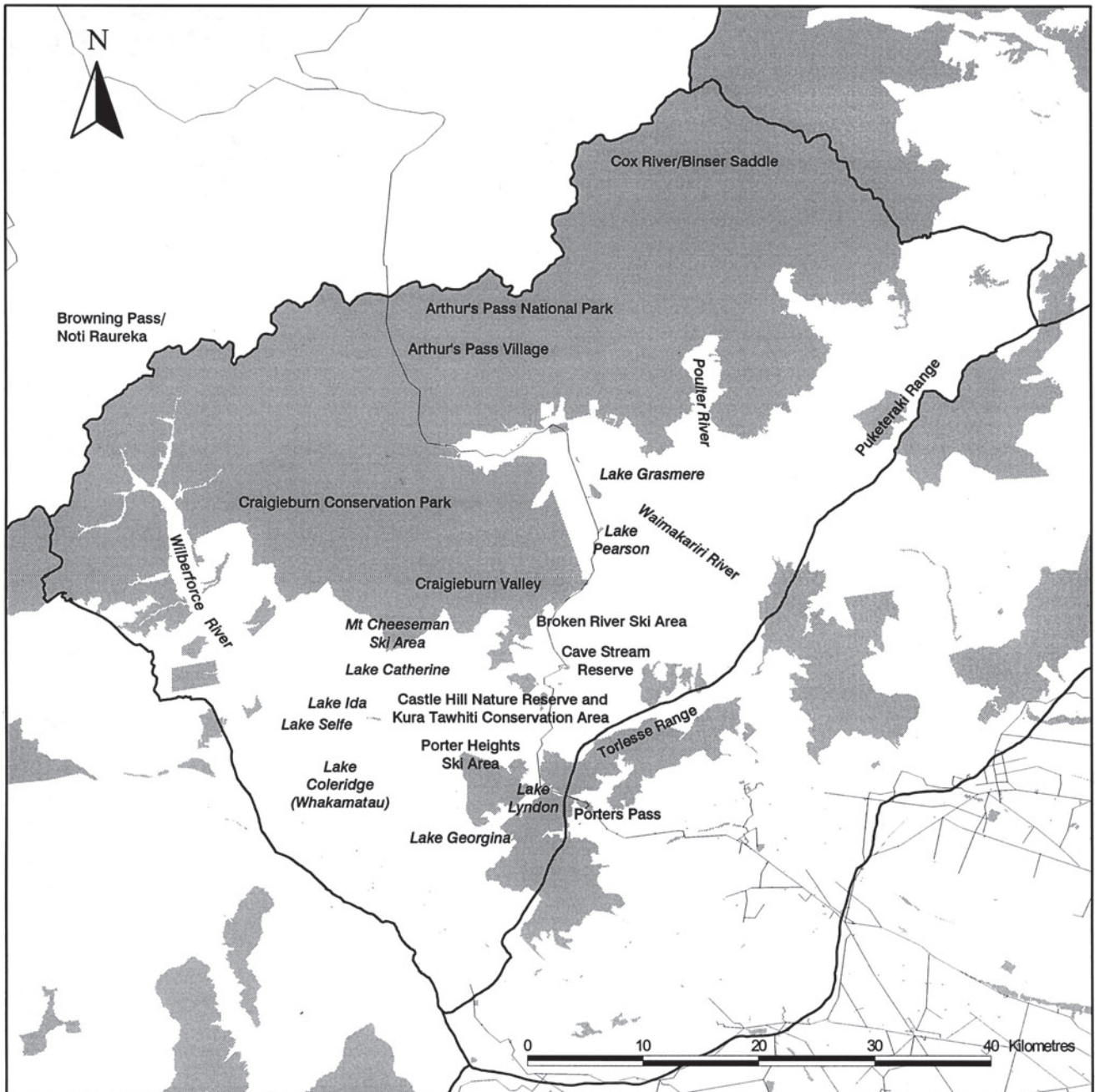


Table 8: Key Priorities for Plains Unit

Name	Issue	Method	Result Sought	See Activity Section
4.6.1 Ecosystems and Species	Only tiny fragments of the natural vegetation of the Canterbury Plains remains Braided rivers are nationally significant for flora and fauna	1. Reservation and covenant 2. Ōtūkaikino restoration programme 3. Landholder liaison 4. District and regional council liaison and advocacy 5. RMA advocacy 6. Weed/pest control 7. Fencing	1. Surviving remnants protected and restored 2. Self-sustaining populations 3. Remnant native ecosystems enhanced 4. Remnants protected by buffering and enhancing ecological linkages and corridors 5. Maintenance of water quality and quantity	5.1.3 Community participation 5.1.4 Communication and Liaison 5.2.3 Land Ecosystems 5.2.4 Freshwater Ecosystems 5.2.6 Indigenous Species
4.6.2 Te Waihora/Lake Ellesmere	Ngāi Tahu settlement, drainage, riparian development, nutrient enrichment, wildlife population trends	1. Implement the outcomes of the Ngāi Tahu Claims Settlement Act 1998 between the Crown and Ngāi Tahu 2. Landholder liaison 3. WCO review 4. RMA methods 5. Riparian protection 6. Rehabilitation 7. Wildlife trend counts 8. Investigate IUCN status	Natural values and mahinga kai enhanced	5.1.2 Treaty Partnership 5.1.4 Communication and Liaison 5.2.4 Freshwater Ecosystems 5.5.2 Statutory Land Management 5.5.4 Survey and Monitoring
4.6.3 Other Coastal Lagoons and Estuaries	Drainage, riparian development and nutrient enrichment	1. Landholder liaison 2. As for 1 in 4.6.2 above 3. RMA methods 4. Riparian protection and rehabilitation 5. Process any Heathcote/Avon/Ōhuta Wetland of International Importance application	1. Natural values and mahinga kai enhanced 2. Protection and rehabilitation of estuarine margins and habitat (e.g. whitebait)	5.1.2 Treaty Partnership 5.1.4 Communication and Liaison 5.2.4 Freshwater Ecosystems 5.2.5 Marine Ecosystems
4.6.4 Kaitorete Spit	Lack of appreciation of the significant nature of conservation values	1. Rūnanga input 2. Rehabilitation 3. Weed/pest control 4. Fencing	The spit's cultural, natural, and wildlife values protected	5.1.2 Treaty Partnership 5.2.3 Land Ecosystems
4.6.5 Canterbury mudfish/kōwaro	Species is threatened and distribution status is not well known	1. Mudfish survey 2. Reservation of habitat 3. Landholder liaison 4. Information sharing	Mudfish habitat and species conserved and protected	5.1.4 Communication and Liaison 5.2.4 Freshwater Ecosystems 5.2.6 Indigenous Species



Map 8 Waimakariri



- CMS Place Unit Boundaries
- Main roads
- Land managed by the Department



4.7 Waimakariri

Introduction

The Waimakariri unit extends from the main divide to the Big Ben, Torlesse and Puketeraki ranges, adjoins the Lake Sumner Forest Park in the north, with the Wilberforce River being the southern boundary. The river valleys draining the main divide are the Waimakariri, Wilberforce, and Poulter. These wide braided rivers are typical of the Canterbury high country. Mountain beech is the dominant forest type in the west of this unit, with high country shrub and tussock lands dominating the induced pastoral landscape to the east.

Features and Issues

People Partnership

Māori interest in the area remains strong because of the traditional greenstone trails, rock art and mahinga kai sites. The Department will continue consulting about a range of interpretation opportunities and ecological and cultural site protection measures. The local Ngāi Tahu rūnanga is Te Ngāi Tuahuriri. A Tōpuni, to be known as the Kura Tāwhiti (Castle Hill) Tōpuni, was declared in recognition of its Ngāi Tahu values, by the Ngāi Tahu Claims Settlement Act 1998. As a result of the Tōpuni, the Minister of Conservation has agreed a number of specific principles to guide the management of Kura Tāwhiti Conservation Area.

The whole unit is very sparsely populated. Pastoral lessees are the dominant resident interest group and the Department works closely with them to achieve agreed conservation goals. Other community groups that have interests in the area are also consulted over a wide range of issues. The area is an important high country recreational focus for Canterbury and West Coast people, as well as those from other parts of New Zealand and overseas.

Communication links with the local community will be kept open through regular contact by local staff in order to develop an open and friendly relationship with groups such as the High Country Division of Federated Farmers, landscape groups, Castle Hill and Arthur's Pass residents' associations, tourist concessionaires, and conservation and recreation groups. Because of the proximity to major population centres, the establishing of ongoing public volunteer projects to assist with nature conservation and recreation work (e.g. wilding tree control and hut maintenance) will be an issue for the future. It is an important area for educational use with lodges at Arthur's Pass, Hawdon River and Craigieburn.

Heritage Conservation

The drier mountains in the east of the unit were previously glaciated, but are now characterised by extensive screes and tarns, outwash basins, glacial-derived wetlands and extensive braided rivers. Limestone outcrops in the Castle Hill basin and coal measures in the Avoca area are notable geological features of the unit.

The range of vegetation types and their gradation from west to east largely reflects climatic influence and the historic effects of fire, grazing, weeds and pests. In the upper reaches of the Wilberforce Valley the vegetation is more typical of the West Coast. Kāmahi, pink pine, leatherwood, *Dracophyllum traversii*, and southern rātā are typical West Coast plants and are rarely recorded elsewhere in Canterbury. The endangered plant *Helicbrysum dimorphum* is present in association with some riparian shrublands. Several rare plants, *Myosotis colensoi*, *Wahlenbergia brockiei* and *Carex inopinata* are found at Castle Hill, some specifically associated with the limestone. *Hebe armstrongii* is found in the Enys Scientific Reserve and Mount White Station; *Ranunculus crithmifolius* in the Lance McCaskill Nature Reserve and *Hebe cupressoides* in the Cave Stream Reserve and Broken River. Several plants in the Castle Hill and other areas in the east of the unit are nationally threatened species and carry the category A status for protection. A large proportion of the unit has been ecologically surveyed.

In some areas extensive farming has resulted in the decline of forests, shrublands and tussocklands, while a combination of factors has resulted in the spread of invasive species such as *Hieracium*, broom and exotic trees.

The landscape of the area is ranked as outstanding by the *Canterbury Regional Landscape Study* (Boffa Miskell Limited and Lucas Associates, 1993) and is recognised in the Selwyn District Plan through the Waimakariri scenic corridor as an outstanding landscape. The limestone formations in the Castle Hill basin are nationally recognised in the district plan through the Waimakariri scenic corridor as an outstanding landscape. The limestone formations in the Castle Hill basin are nationally recognised symbols of great cultural value. The success of some tourism ventures (such as the Tranz Alpine Express) depend upon the maintenance of this significant natural landscape.

Most of the unit is protected as national park or conservation park while the rest is conservation area,



Crown pastoral lease, University of Canterbury endowment lands or freehold land. Tenure review of Crown pastoral leases and endowment lands may add significant new areas to land managed by the Department.

Important bird populations include kowhiowhio/blue duck, great-spotted kiwi/roaroa, kea, southern crested grebe/kāmana and braided river birds such as wrybill/ngutu-pare. Mohua/yellowhead is largely extinct in the unit and it is no longer viable to maintain sustainable populations.

Three threatened skinks/mokomoko (the scree skink, long-toed skink and striped skink) are known to be in the Waimakariri unit but information on their status and distribution is lacking.

Human History

Māori used Browning Pass/Noti Raureka as a trading route for pounamu. The Castle Hill area contains rock drawings and Ngāi Tahu values that have promoted the Kuri Tawhiti (Castle Hill) Tōpuni, as set out in Appendix 4.

European pastoralists settled in the area in the early 1860s, pioneering runs such as Grasmere and Mount White. Some early homesteads and huts remain today. The discovery of the West Coast gold fields led to the rapid improvement in transportation systems, from coaches, to rail and roads. A coach from this era is on display at the Arthur's Pass National Park Visitor Centre. The Arthur's Pass Village has many relics from the establishment of the railway line and Ōtira Tunnel.

The mineral potential of the alps led to gold prospecting in the 1880s in quartz veins in the headwaters of the Wilberforce, with a brief revival of interest in the 1930s. Coal was mined in the Avoca area in the 1920s.

Recreation and Use

This area provides for a wide range of recreation opportunities contained within a relatively small area. It is easily accessible from State Highway 73 (SH73) and the transalpine railway line, which are highly scenic east-west visitor routes. This area includes some of the best and most accessible high country fishing areas in the region. The Craigieburn Range ski fields (Porter Heights, Mount Cheeseman, Broken River, Craigieburn Valley and Mount Olympus) provide skiing for Christchurch residents and visitors. The ski fields generally provide accommodation on the mountain.

Arthur's Pass National Park and Craigieburn Conservation Park provide many alpine climbing, tramping, walking and hunting opportunities.

Cave Stream Scenic Reserve and the Kura Tāwhiti Conservation Area limestone tors make a popular day outing for many groups from Christchurch and the West Coast. This area has the only easy caving opportunity in the region. The scenic limestone tors provide opportunities for climbers to test their rock-climbing skills.

The Porters Pass and Lake Lyndon area is popular for family day outings (tobogganing in winter and water-skiing in summer), because of its proximity to Christchurch.

The two-day Coast-to-Coast multi-sport event that passes through Arthur's Pass National Park and the Waimakariri Gorge area, and the Avalanche Peak Challenge are internationally recognised events.



Areas Managed by the Department

The following areas are described in more detail in Volume 2, Schedule 2:

Name	Unit
Arthur's Pass National Park	K33011
Bealey Spur Conservation Area	K34012 (includes K34013)
Broken River Forest	L34017
Cave Stream Scenic Reserve	K34028
Corner Knob and Goldney Hill	K34017
Craigieburn Conservation Park	K34002
Enys Scientific Reserve	K34029
Hawdon Flats, adjacent APNP	K33012
Kōwai Forest	K35013
Kura Tāwhiti Conservation Area	K34032
Lake Grasmere Recreation Reserve and Wildlife Refuge	L34002
Lake Grasmere Scenic Reserve	L34001
Lake Ida	K34026
Lake Lyndon marginal strip	K35049
Lake Pearson Recreation Reserve	L34006
Lance McCaskill Nature Reserve	K34031
Lochinvar Forest	L33008
Mount White Conservation Area	L33022
Part central Southern Alps and Wilberforce Conservation Area	K34001
Porter Heights Conservation Area	K35010
Waimakariri Riverbed Conservation Area	K34011
Wilberforce Riverbed Conservation Area	K34024

Key Priorities

4.7.1 Ecosystems and Species

Issues

The unit consists of six ecological districts, three of which have been formally surveyed under the PNA programme (see 5.5.4 Survey and Monitoring).

While progress has been made in adding to the network of protected areas, the full range of types of vegetation and natural landscape types is not yet covered. Many areas outside land managed by the Department need greater recognition and protection.

Indigenous birds such as the great-spotted kiwi/roa, kea and blue duck/kowhiowhio, and indigenous plant species such as *Helichrysum dimorphum* are subject to many threats, both on land managed by the Department and on land of other tenure. The area has many endemic plant species, particularly associated with limestone ecosystems in the Castle Hill basin. Major threats to birds include introduced predators and human disturbance while threats to plants include fire, grazing and plant and animal pests. The issue is to ensure the survival of such species through habitat protection and enhancement.

Tenure review of pastoral leases and endowment lands (see 5.2.3 Land Ecosystems) is an active process in this unit, providing opportunities for natural values protection.

Objectives

- To identify the significant indigenous vegetation and threatened plant and animal species of the Waimakariri unit.
- To use a range of effective methods to protect the indigenous biodiversity of the Waimakariri unit.
- To protect and enhance the viability of priority threatened species' populations and their habitats in the Waimakariri unit.



Implementation

The Conservancy will:

1. Carry out a more detailed ecological survey and inventory of the Wilberforce Valley. If suitable, review its classification for protection as an addition to the Craigieburn Conservation Park.
2. Seek to protect where possible, through tenure review, sufficient areas of lower altitude country with natural values to effectively link the main divide mountains of Arthur's Pass National Park with the Puketeraki Range, and the Craigieburn Range with the Torlesse and Big Ben ranges.
3. Establish effective methods for dog control in Arthur's Pass National Park, and liaise with Transit New Zealand to reduce threats to kiwi from traffic.
4. Negotiate with landholders to protect significant areas of indigenous vegetation/wildlife habitat (see 5.2.3 Land Ecosystems).
5. Undertake research and surveys to clarify the distribution, status, habitat preferences and threats of the following species in the unit:
 - Reptiles
 - scree skink
 - long-toed skink
 - striped skink
 - Birds
 - Wrybill/ngutu-pare
 - New Zealand falcon/kārearea
 - great-spotted kiwi/roa
 - blue duck/kowhiowhio
 - yellowhead/mohua
 - southern crested grebe/kāmana
 - kākā
 - orange-fronted parakeet/kākāriki-whereo
 - black-fronted tern/tarapirohe
 - yellow-crowned parakeet/kākāriki-kōwhai
 - black-billed gull/tarāpuka
 - buff weka
 - kea
 - Fish
 - short-jawed kōkopu
 - Plants
 - *Carex inopinata*
 - *Australopyrum calcis*, subsp. *optatum*
 - *Helichrysum dimorphum*
 - climbing broom
 - cypress hebe
 - *Hebe armstrongii*
 - *Myosotis colensoi*
6. Advocate for the protection of indigenous biodiversity, including the habitat of threatened species and the healthy functioning of ecosystems.
7. Advocate effective-means to avoid adverse effects to the habitat of threatened species in Canterbury Regional Council and district council plans for the following species in the unit:
 - short-jawed kokopu
 - blue duck/kowhiowhio
8. Propagate the following species for the unit:
 - *Carex inopinata*
 - climbing broom
 - cypress hebe
 - *Hebe armstrongii*
 - *Carex inopinata*
 - *Helichrysum dimorphum*



9. Undertake plant and animal pest control to reduce their threat to the following species:
 - *Helichrysum dimorphum*
 - *Hebe armstrongii*
 - *Myosotis colensoi*
 - kākā
 - braided river bird species
10. Seek formal habitat protection for the short-jawed kōkopu.
11. Utilise publications, interpretive material, the media and personal contact to outline management issues associated with the kea.

4.7.2 Lakes and Wetlands

Issues

There are a number of lakes, rivers and associated wetlands of important natural character (including landscape value) in basins associated with the Waimakariri, Coleridge and Ryton catchments. These include Lakes Lyndon, Hawdon, Letitia, Marymere, Blackwater, Sarah and Pearson (Moana Rua) in the north and Catherine, Coleridge (Whakamata), Georgina, Ida, Selfe, Evelyn and Henrietta in the south. These water bodies and their surrounds provide important habitats for indigenous species such as the crested grebe/kāmana and are also well used for a variety of recreational activities such as boating (including wind-surfing), fishing and camping. Recreational use may conflict with species protection, and water quality can be affected by nutrient enrichment from adjacent land. Of the lakes, only Pearson and Ida have beds managed by the Department; the remainder are Crown land or private land. Lake Grasmere is managed as a wildlife refuge. Uncontrolled willow growth can also have an adverse effect on lake margins and downstream catchments.

The Coleridge Hydro Power Scheme has had adverse effects on natural values and will be subject to ongoing RMA consent monitoring and review.

Objectives

- To support land management practices that will maintain natural ecosystems, landscape and indigenous species populations.
- To encourage recreational use compatible with the protection and enhancement of indigenous species and habitats.

Implementation

The Conservancy will:

1. Investigate and, if necessary, seek to change the protected status of Crown land lakebeds and margins.
2. Monitor crested grebe/kāmana populations, and promote and improve habitat protection.
3. Seek speed and noise controls on lakes where boating restrictions would improve indigenous species breeding and survival.
4. Promote and assist with willow control and habitat enhancement programmes on lakeshore margins.
5. Advocate through RMA consent processes that the natural character of the Coleridge hydro-electric power area be protected, and assist any established habitat enhancement trust or group to achieve better protection of wetlands in the Coleridge catchment.
6. Advocate for Canterbury Regional Council plans to provide effective lake bed, discharge, water level, quality and flow rules to protect and enhance the natural values of the lakes.
7. Advocate for the Selwyn District Plan to provide effective land use, subdivision, water surface and esplanade rules to protect and enhance the natural values of the lakes including the value of natural quiet.
8. Ensure that camping, toilet, and other recreation facilities avoid, remedy or mitigate adverse effects on natural character, water quality and lake margins.
9. Protect lakes, rivers, wetlands and catchments through the tenure review process and other landholder negotiations.
10. Encourage relevant authorities to either stop legal road in favour of reserve status or bring Crown land strips under the management provisions of either the Reserves or Conservation Acts to provide legal protection for lake edge natural values.
11. Seek a landscape assessment of the northern Lake Coleridge and Ryton catchments.



4.7.3 Exotic Tree Control

Issues

A variety of exotic tree species have been planted within the Craigieburn area, mainly for research and trial purposes. The plots contain species that spread quickly, are difficult to control, displace indigenous vegetation, and are of minor future scientific value. The major areas of concern are within and around Craigieburn Conservation Park. Wilding tree spread will remain an ongoing management issue here and throughout the Waimakariri unit. Agreements are required with research agencies to ensure effective containment and control with conservation and research outcomes.

Objectives

- To ensure the Craigieburn exotic forest plots are either removed and/or adequately contained through negotiated agreements with research agencies.
- To contain and/or remove wilding trees in the area generally.

Implementation

The Conservancy will:

1. Implement, monitor and facilitate the Craigieburn Conservation Park exotic tree control agreement.
2. Implement agreements for the retention of exotic tree research plots in Craigieburn Conservation Park (see 5.5.5 Research).
3. Undertake eradication programme for plots in the Harper River catchment.
4. Eradicate and contain wilding trees in other significant areas managed by the Conservancy in the unit e.g. the Torlesse Range.
5. Support wilding tree control on other lands with the assistance of research agencies, land care groups, landholders and community groups.
6. Advocate that district and regional plans include objectives, policies and methods to prevent increases in wilding pine spread; and which require any proposed activity or development to avoid, remedy or mitigate adverse effects of wilding tree spread.

4.7.4 Visitor Services

Issues

There is a need to provide more roadside short walks and facilities to complement the existing network of tracks in more remote areas. Commercial recreation and tourism, especially in the upper Waimakariri basin, is growing in intensity. Many high country farms offer tourism activities outside land managed by the Department. On land managed by the Department, concessionaires are increasing their activities and the effects of these will need to be monitored and managed. There are two ski fields (Craigieburn Valley and Broken River) within the Craigieburn Conservation Park and access to a third (Cheeseman). Porter Heights ski area is in a conservation area and Temple Basin ski field is in Arthur's Pass National Park. The existing Ōtehahe Wilderness Area (Arthur's Pass National Park) does not meet the requirements of the *Wilderness Policy* (1983) because of its inadequate size and the presence of developments.

Objective

- To manage visitors in a way that is not inconsistent with the conservation of natural and historic resources, through the maintenance and development of suitable facilities, information and services.

Implementation

The Conservancy will:

1. Enhance visitor use on land managed by the Department through the maintenance of a hut and track network and the provision of appropriate facilities (including interpretation) at priority sites.
2. Develop an environmentally sensitive local track and walk network focused on Arthur's Pass Village. This will link the top of the pass and village with day-walk tracks.
3. Liaise with all outdoor education centres and school groups that visit the area and encourage the co-ordinated development of facilities.
4. Maintain the Arthur's Pass Visitor Centre as a primary public contact point to promote conservation and information services, and to identify recreational activities and opportunities on land managed by the Department.



5. Monitor ski field use and management, and implement concession conditions to minimise adverse effects on natural and historic resources (see 5.4.2.8 Ski Areas).
6. Manage mountain-bike usage (particularly in Craigieburn Conservation Park).
7. License all private accommodation in Craigieburn Conservation Park which meets the implementation methods in 5.4.2 (Concessions General) 5.4.2.6 (Private Dwellings and Structures) and 5.4.2.7 (Accommodation).
8. Seek the revocation of the wilderness area status of the Ōtehae area of the Arthur's Pass National Park and, once revoked, manage it as a 'remote experience area'. The area will be managed as a wilderness area in the interim.
9. License and monitor the Coast-to-Coast and other sporting and special events which meet the implementation methods in 5.4.2 (Concessions General) and 5.4.2.12 (Sporting and Other Events).

4.7.5 SH73 Roadside Facilities, Interpretation, and Roding Development

Issues

Many important natural landscapes and features occur alongside State Highway 73 from the Canterbury plains to the West Coast, particularly between Porters Pass and Arthur's Pass.

Most notable are the vegetation associations and visual landscapes of the two passes, Craigieburn Range, the many lakes, and the Castle Hill limestone area. Appreciation of these features would be assisted by high-quality interpretation and maintenance of facilities at sites managed by the Department.

Objectives

- To assist public appreciation of natural and historic values, and foster appropriate facility development adjacent to SH73 between Porters and Arthur's passes.
- To install and maintain high-quality recreational facilities and interpretive panels at roadside rest areas managed by the Conservancy along SH73 between Porters and Arthur's passes, and further west in conjunction with the West Coast Conservancy.

Implementation

The Conservancy will:

1. Liaise with Transit New Zealand and Selwyn District Council to implement the *The Arthur's Pass Highway: a strategy for development and management of roadside stopping places*. (Corbett and Bennett 1998).
2. Replace, remove or upgrade any substandard roadside facilities, interpretive panels and signs managed by the Department.
3. Consult with Transit New Zealand, Selwyn District Council, Te Rūnanga o Ngāi Tahu and Te Ngāi Tuahuriri Rūnanga in the preparation of facilities and interpretation.
4. Support and promote the recognition of SH73 from the edge of the Canterbury Plains to Kumara as a nationally significant scenic highway.

4.7.6 Waimakariri Basin

Issues

The Waimakariri basin contains geological formations, landforms, species and associated habitats that are nationally recognised to be of high ecological and cultural value. A number of sites (such as the Lance McCaskill Nature Reserve, Kura Tāwhiti Conservation Area and the Cave Stream Scenic Reserve) are managed by the Department, while others are on pastoral and university endowment lease. The limestone formations are also a focus of casual recreational climbing and concessionaire usage. Both plant species and cultural values can be threatened by inappropriate use. An outcome of the Ngāi Tahu Claims Settlement Act 1998 is the Kura Tāwhiti (Castle Hill) Tōpuni.

Objectives

- To protect the natural, historic and cultural values of the landforms and associated habitats of the Waimakariri basin.
- To foster recreation and allow commercial usage of the land managed by the Department in the basin in a manner that protects its unique natural, historic and cultural values.
- To avoid harm to, or the diminishing of, the Ngāi Tahu values relating to the Kura Tāwhiti (Castle Hill) Tōpuni.



Implementation

The Conservancy will:

1. Take the actions specified in the *Deed of Settlement* (1997) at Attachment 12.140 to encourage respect for and accurate portrayal of Ngāi Tahu's association with the Kura Tāwhiti (Castle Hill) Tōpuni area, and recognition of Ngāi Tahu's relationship with wāhi tapu and wāhi taonga, including archaeological sites.
2. Investigate the gazettal of the Kura Tāwhiti Conservation Area as a scenic reserve and seek additions to the reserve.
3. Protect and enhance the habitat of rare and threatened plant species.
4. Foster recreational activities in the Kura Tāwhiti Conservation Area that are sympathetic to the natural, historic and cultural values of the area, and that protect the stone formations from adverse effects, consistent with Implementation 1 above.
5. Set limits on the number and frequency of commercial visits to the Cave Stream Scenic Reserve cave system to avoid, remedy or mitigate adverse effects (see National Karst Guidelines).
6. Support efforts by other land managers and Selwyn District Council to recognise the outstanding landscape qualities of the area.
7. Protect outstanding landforms through tenure review process and negotiation.
8. Advocate, through Resource Management Act methods, for the establishment and recognition of the basin as an outstanding landscape.
9. Consider additions to the Craigieburn Conservation Park or the proposed Torlesse Conservation Park of land acquired by the Department through tenure review.

4.7.7 Cox-Binser Addition to Arthur's Pass National Park

Issues

The Arthur's Pass National Park Management Plan Review was approved on 19 October 1994.

The Cox River/Binser Saddle area was added to the National Park in August 1994. The draft review had progressed to such a stage that it could not be revised to adequately incorporate the Cox-Binser Area before its approval. It is intended to confirm through this draft CMS and the submission process that all relevant objectives, policies and criteria in the *Arthur's Pass National Park management plan* (1995) apply to the Cox-Binser area and any further additions that are made to the park during the duration of that plan.

Objective

- To confirm that the relevant sections in the *Arthur's Pass National Park Management Plan* (1995) apply to the Cox River/Binser Saddle area and any other areas subsequently added to the park while the plan is operative.

Implementation

The Conservancy will:

1. Manage the Cox River/Binser Saddle area and any further additions to APNP in accordance with the relevant objectives, policies and criteria in the *Arthur's Pass National Park Management Plan* (1995) while the plan is operative.
2. Amend the *Arthur's Pass National Park Management Plan* to incorporate specific reference to the Cox-Binser area and future additions.

Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include:

- invertebrate conservation
- gorse and broom eradication
- new departmental walkways
- new departmental huts
- maintenance of low-priority recreational facilities



Table 9: Key Priorities for Waimakariri Unit

Name	Issue	Method	Result Sought	Activity
4.7.1 Ecosystems and Species	1. The area has not been fully surveyed for its remaining ecological values 2. Many threatened animal and plant species dwell in the unit	1. Reservation 2. Covenant 3. RMA advocacy 4. Landholder liaison 5. Weed/pest control 6. Fencing 7. Tenure review	1. A range of significant ecosystems/habitats/species identified and adequately protected 2. Self-sustaining species populations 3. Protected land corridor between Arthur's Pass National Park, Craigieburn Conservation Park and eastern ranges	5.1.4 Communication and Liaison 5.2.3 Land Ecosystems 5.2.4 Freshwater Ecosystems 5.2.6 Indigenous Species 5.5.4 Survey and Monitoring
4.7.2 Lakes and Wetlands	Maintenance of adequate species and habitats	1. Advocate for and protect lakeshore, water quality and water surface areas 2. Advocate compatible recreational use	1. Species/landscape enhanced 2. Protected status 3. Uses compatible	5.2.4 Freshwater Ecosystems 5.2.6 Indigenous Species 5.3.2 Recreation Opportunities
4.7.3 Exotic Tree Control	Tree spread from Craigieburn Conservation Park and in other areas is of conservation and landscape significance	1. Negotiate agreement about priorities for tree control 2. Advocate for responsible use of exotic trees 3. Chemical/physical removal 4. RMA advocacy	Exotic trees removed or effectively contained.	5.1.3 Community Participation 5.2.9 Plant Pests and Exotic Plants
4.7.4 Visitor Services	1. Increased visitor use. 2. Protect natural and historic resources 3. Identify recreation activities and opportunities	1. Develop sites adjacent to SH73 and Arthur's Pass Village 2. Control mountain bike usage 3. Consider and review concession applications for private accommodation, ski fields, aircraft access and sporting event concession applications and monitor successful concessions 4. Restrict aircraft landings in Arthur's Pass National Park 5. Revoke Otehae wilderness area status. 6. Review licence, and monitor Coast-to-Coast and Avalanche Challenge sporting events	A high quality of visitor services maintained, without diminishing natural values	5.3.2 Recreation opportunities 5.3.3 Recreation Facilities 5.3.4 Visitor Impacts and Safety 5.3.5 Visitor Centres 5.3.6 Interpretation 5.4.2 Concessions General

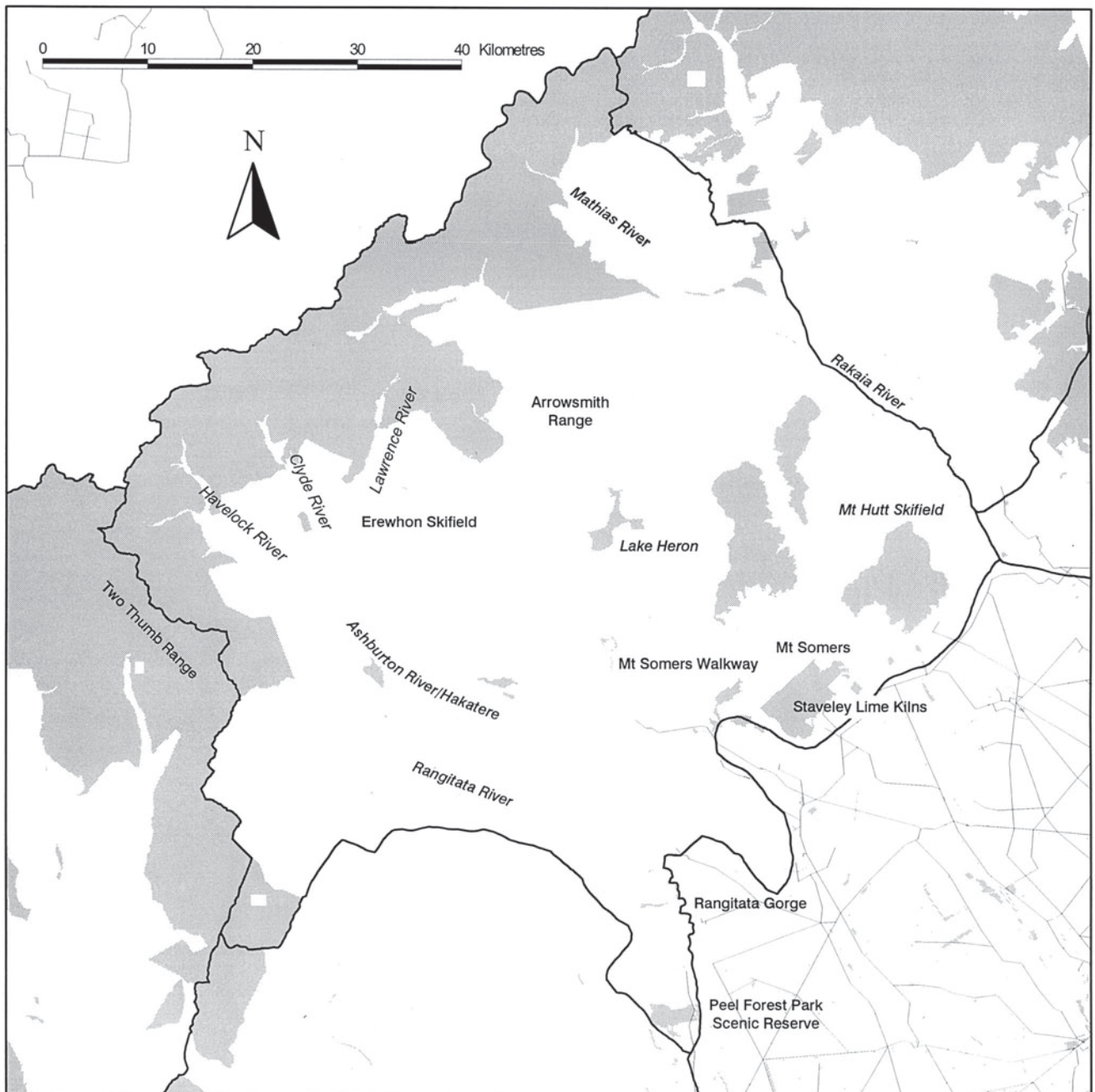
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Table 9: Key Priorities for Waimakariri Unit

Name	Issue	Method	Result Sought	Activity
4.7.5 SH73 Roadside Facilities, Interpretation and Roading Development	1. SH73 from Porters Pass to Arthur's Pass requires high-quality interpretation 2. Impacts of highway and rail maintenance and development on natural values	1. Install and maintain site interpretive panels and recreational facilities at roadside. 2. APNP management plan criteria and EIA requirements 3. Gazette addition and removal of land from APNP.	1. Public more informed of the natural and historic values of the Waimakariri basin. 2. Adverse effects of roading and rail development and maintenance are avoided, remedied or mitigated	5.1.2 Treaty Partnership 5.3.3 Recreation Facilities 5.3.6 Interpretation 5.4.2 Concessions General 5.5.6 Environmental Protection
4.7.6 Waimakariri Basin	Protection of outstanding landscape, vegetation and habitat character and cultural values. Area added to park but not included in the APNP management plan.	1. Encourage protection of high value landforms 2. Manage recreational and commercial usage 3. RMA advocacy 4. Tenure review 5. Give effect to Kura Tāwhiti Tōpuni	1. Increased protection for landform sites 2. Recreational use compatible with high natural and cultural values 3. Additions to Craigieburn Conservation Park and establishment of Torlesse Conservation Park	5.1.2 Treaty Partnership 5.2.2 Landscape 5.2.3 Land Ecosystems 5.3.4 Visitor Impacts and Safety
4.7.7 Cox-Binser Addition to Arthur's Pass National Park		1. CMS objectives and implementation statements clarify that the area is subject to APNP management plan 2. Amend APNP management plan	Area is subject to CMS and APNP objectives, policies and criteria	6.1 Plans and Functional Strategies

Map 9 Rangitata



- CMS Place Unit Boundaries
- Main roads
- Land managed by the Department

4.8 Rangitata

Introduction

The Rangitata unit comprises a system of basins and ranges, the product of glacial action and subsequent fluvial erosion. It is bounded in the north by the Rakaia River and in the south by the Two Thumb Range and the waters of the Rangitata Catchment. The western and eastern boundaries are the main divide and the Canterbury plains.

Features and Issues

People Partnership

The area is of particular interest to Ngāi Tahu because it has been the source of seasonal food and natural material, and it provided access routes around the high country and to the West Coast (over Browning Pass/Noti Raureka). The unit forms part of the takiwā/area of Te Rūnanga o Arowhenua.

The alpine areas, high country (including inland mountain ranges and intermontane basins) and foothills are a focus of recreation and conservation interest. Conservation programmes are run by the Royal Forest and Bird Protection Society, the Central South Island Fish and Game Council and the local Conservation Corps.

The area has no major urban settlements, and is dominated by individual pastoral runs. A seasonal influx of people undertake recreational activities, particularly within the Ashburton Lakes area. Local runholders have recently begun to form landcare groups to address land management issues within the area.

Heritage Conservation

The unit conveys a sense of naturalness and wilderness. The overall character is one of space, remoteness and grandeur in an alpine setting of snow and ice, glacier and lakes, interspersed with remnants of upland forest, tussock grassland and several major wetlands.

The effects of past glaciation are clearly evident with lakes and kettleholes, glacial moraines and terraces, and cirque basins at higher elevations all being common. More recent fluvial action has so modified the landscape that braided river beds, river terraces and alluvial fans characterise the margins of basins and valley floors. The braided rivers of the Rakaia, South Ashburton/Hakatere, and Rangitata link the mountains and the coast, and provide a distinctive habitat for wading birds, indigenous plants, and invertebrates. The Mount Somers area is of special significance because of its volcanic geology and associated distinctive values.

A large intermontane basin contains what is known as the Ashburton lakes – a collection of lakes, kettleholes and wetlands. This complex supports a variety of waterfowl, including the threatened southern crested grebe/kāmana, New Zealand scaup/pāpango, smaller aquatic invertebrates, and indigenous and introduced fish. The indigenous plant communities surrounding the wetlands are extensive and diverse. They include red tussock, bog rush, sedges, rushes, and short turf-lands along some lake shores and at Spider Lakes.

The northern part of this basin, the Lake Heron and Cameron River catchments, are subject to the Rakaia National Water Conservation Order.

Forests comprise some interesting components, both locally and nationally, because of their rarity and distinctiveness. Associations and species more typical of the West Coast occur in the upper catchments of the Rakaia and Rangitata, including tōtara, cedar/pāhautea, mountain toatoa, both miro and matai, rātā, *Dacrydium biforme*, mountain neinei and *Olearia ilicifolia*/hakeke and *O. colensoi*.

The mountain habitats are also home to a range of bird species occupying niches from mountain torrent to forest, and to the alpine herbfields. Species include blue duck/kowhiowhio, kea and New Zealand falcon/kārearea. Lizards/ngārara and skinks/mokomoko are also present but the terrestrial invertebrate fauna is less well known and recorded. One notable occurrence is the presence of an undescribed species of weta *Deinacrida*, near Mount Somers.

(See also 4.10.4 regarding a conservation park proposal for the Two Thumb Range.)

Human History

Cabbage trees/ti kouka, fern root/aruhe, weka and waterfowl (particularly from the inland lakes) were traditional food sources in this area. There is an account of the discovery of Brownings Pass/Noti Raureka in about 1700 by Raureka, a woman of the Ngāti Wairangi tribe who led a group of Ngāi Tahu to begin the trade in pounamu.

European pastoral settlement in the 1850s is notable for famous runs in the Rakaia, Rangitata and Ashburton/Hakatere catchments. Samuel Butler's four-year association with the area, and his subsequent

books based on the landscape of the upper Rangitata, such as *Erewhon* (Butler, 1987), helped to develop a mystique about the South Island high country.

Peel Forest was extensively utilised for timber and, with a growing awareness of the need for forest conservation, particularly podocarp forest, Peel Forest Station gifted part of Peel Forest Park to the Crown. Sawpit remnants still exist in the park.

Mount Somers is the only part of Canterbury to have successfully produced commercial amounts of minerals, eg. coal, limestone and silica sand. The Mount Somers coal mine has the distinction of being the oldest continuously worked mine in the country. The Buxton lime kilns are the best-preserved example of a limeworks in Canterbury.

Recreation and Use

The number of reserves in the unit and their closeness to reasonably significant urban areas has resulted in a number of camp-sites and picnic areas serving as roadside facilities. A major camping-ground at Peel Forest services about 12,000 visitors per year.

The Mount Somers grouping of reserves and conservation areas (e.g. Alford Forest, Sharplin Falls) is well used during summer months, mostly by people from Canterbury. The Ashburton lakes have nationally significant wildlife values, and are also popular for fly fishing, water-skiing, wind-surfing and boating.

Mount Hutt ski field, which is of international standard, attracts many visitors from Canterbury, other parts of New Zealand and overseas. The Erewhon Club ski field has operated in the area.

The Arrowsmith Range and upper Rangitata-Rakaia rivers provide wilderness and remote-experience climbing, hunting, heli-skiing and tramping opportunities. The Rangitata Gorge is a popular grade 5 rafting opportunity and is guided commercially.

Areas Managed by the Department

The following areas managed by the Department are described in more detail in Volume 2, Schedule 2.

Name	Unit
Alford Forest, Mount Somers Block	K36024
Alford Forest, Woolshed Creek Block	K36012
Alford Scenic Reserve	K36007
Clyde Forest	I35004
Dr Sinclair's Gravesite, upper Rangitata	J36006
Havelock Forest	I35003
Lake Camp Recreation Reserve	J36017
Lake Heron Nature Reserve and Wildlife Refuge	J35006
Lawrence Forest	J35004
Māori Lakes Nature Reserve	J36002
Mesopotamia Conservation Area	I36006
Mount Hutt Forest	K35045
North Mathias to Rolleston Range Conservation Area	J40012
Part Run 77 Retirement Area	I37001
Peel Forest Park Scenic Reserve	J37006
Pudding Hill Scenic Reserve	K36001
Rakaia Forest	J35002
Rangitata - Rakaia Conservation Area	J35001
Raules Gully Scenic Reserve	J36012
Sharplin Falls Scenic Reserve	K36026
Upper Rangitata Riverbed Conservation Area	J36004

Key Priorities

4.8.1 Ecosystems and Species

Issues

The unit consists of seven ecological districts, four of which have been formally surveyed under the PNA programme (see 5.5.4 Survey and Monitoring). Two unsurveyed ecological districts contain significant areas managed by the Department. Ōrari ecological district remains to be surveyed.

Surveys carried out under the PNA programme have identified a considerable number of recommended areas for protection (RAPs) covering lakes, wetlands, braided rivers, and short and tall tussock grasslands that represent the best examples of natural diversity of this area.

Many of these areas are not formally protected and are, in some cases, at risk from competing pastoral farming activities such as drainage, burning and grazing.

Tenure review of pastoral leases and endowment lands (see 5.2.3 Land Ecosystems) is an active process in this unit, providing opportunities for natural values protection.

The upper Rangitata and Ashburton/Hakatere riverbeds, Ashburton lakes, the volcanic ecosystems of Mount Somers, and alpine ecosystems of the unit provide rich and diverse habitats for species in the area. The upper Rangitata and Ashburton/Hakatere riverbeds were rated as outstanding wildlife habitat by the former Wildlife Service.

Objectives

- To identify the significant indigenous vegetation and threatened plant and animal species of the Rangitata unit.
- To use a range of effective methods to protect the indigenous biodiversity of the Rangitata unit.
- To protect and enhance the viability of priority threatened species' populations and their habitat(s) in the Rangitata unit.

Implementation

The Conservancy will:

1. Survey the Ōrari ecological district, in accordance with priorities set in 5.5.4 (Survey and Monitoring).
2. Undertake research, surveys, or both to clarify the distribution, status, habitat preferences and threats of the following species:
 - Reptiles
 - scree skink
 - striped skink
 - Invertebrates
 - Mount Somers bluff weta
 - Mount Cook weta
 - alpine scree weta
 - Bats
 - long-tailed bat/pekapeka
 - Birds
 - black-fronted tern/tarapirohe
 - banded dotterel/pohowera
 - rock wren
 - New Zealand falcon/kārearea
 - kea
 - southern crested grebe/kāmana
 - wrybill/ngutupare
 - Fish
 - short-jawed kōkopu
 - Plants
 - *Ischnocarpus novae-zelandiae*
3. Advocate for the protection of indigenous biodiversity including the habitat of threatened species and

the healthy functioning of ecosystems.

4. Advocate effective means to avoid adverse effects to the habitat of threatened species within Canterbury Regional Council and District Council plans for the following species:
 - Mount Somers bluff weta
 - black-fronted tern
 - banded dotterel
 - southern crested grebe
5. Manipulate southern crested grebe habitat to enhance the species' population.
6. Use publications, interpretative material, the media and personal contacts to outline management issues associated with the kea.
7. Advocate for effective methods to avoid adverse effects to the habitat of the long-tailed bat.
8. Seek the protection of indigenous biodiversity through the tenure review process.

4.8.2 Mount Somers

Issue

The Mount Somers area is remarkable for its high natural values. These include volcanic landforms, rare plant species, Mount Somers bluff weta, alpine cushion bogs and the popular Mount Somers Walkway. Since the late 1980s, progress has been made in integrating management of this area with the assistance of local residents. Department-managed lands within this area include the Alford Forest blocks and Sharplin Falls scenic reserve.

See also Volume 2, Map Sheet 7 Rangitata, and Schedule 2.

Objectives

- To identify, protect and manage the natural and historic resources and recreational values of the Mount Somers area.
- To encourage community participation in the management of natural and historic resources and recreational values of the area.

Implementation

The Conservancy will:

1. Monitor and control the adverse effects of plant pest species, especially the noxious plant Spanish heath at Staveley.
2. Undertake a reconnaissance survey for the Mount Somers bluff weta at Mount Somers.
3. Monitor and protect *Iphigenia novae-zelandiae*.
4. Encourage scientific studies to gain understanding of the ecosystems, processes and species in the area.
5. Work with the Mount Somers Walkway Society to maintain and upgrade the walkway and associated facilities.
6. Facilitate boundary and status change to meet conservation and recreation objectives for the area.
(See also 4.8.5 Staveley Lime Kilns)

4.8.3 High Country Lakes, Rivers and Wetlands

Issue

The Heron basin, Ashburton lakes (Ō Tū Wharekai) and upper Rangitata are recognised as 'outstanding landscapes' (Boffa Miskell Limited and Lucas Associates, 1993). They clearly demonstrate their formative geological processes, clarity of landform (different from more southern basins), wetlands, tussock grasslands and other biological features.

The Ashburton lakes, the adjoining upper Ashburton/Hakatere and Rangitata riverbeds, and associated wetlands provide a very significant ecosystem and habitat feature in the unit. The lakes and riverbed-based wetlands lack integrated protection mechanisms against developments that degrade water and habitat quality in the area. Boating and wind-surfing noise and speed, and fishing disturbance may be adversely affecting wildlife on the lake edges. Agricultural intensification has also adversely affected natural values in the area.

The wetlands are nationally recognised as a priority area for recognition through such mechanisms as a Water Conservation Order (WCO). The current reserve status for some lakes does not reflect appropriate management; for example, the status of Lake Heron and Māori Lakes as nature reserves legally requires permit-only access.

Objectives

- To advocate integrated management of the Ashburton lakes area to protect and enhance natural and historic resources; and to provide for compatible recreation opportunities.
- To promote appropriate land tenure, reserve status and RMA protection to protect natural character values and provide for appropriate recreation.

Implementation

The Conservancy will:

1. Seek, through appropriate methods such as tenure review and district plans, to protect, maintain and enhance the area's heritage landscape and heritage landscape values.
2. Investigate feasibility of a water conservation order for the Hakatere ecological district wetlands. The scope of the WCO will be subject to public consultation and will have regard to the provisions of any relevant regional plan.
3. Advocate for Canterbury Regional Council plans to provide effective lake bed, riparian, discharge, water level, quality, and flow rules to protect and enhance the natural values of the Ashburton lakes.
4. Advocate for the Ashburton district plan to provide effective land use, subdivision, water surface (watercraft noise and speed), and esplanade and riparian rules to protect and enhance the natural values of the Ashburton lakes.
5. Liaise with landholders to avoid or reduce the adverse effects of pastoral intensification and grazing on the Ashburton lakes and to promote riparian protection in the area.
6. Establish an adequate sign system in the area to inform visitors of their responsibilities.
7. Liaise with Ashburton District Council, landholders and recreational groups in the Ashburton lakes to provide for and manage recreation opportunities, assess the impacts of recreational activities on bird populations, and avoid or mitigate unnecessary recreational adverse effects on wildlife values.
8. Monitor and control predators where necessary, particularly feral cats and wild mustelids that pose a threat to several threatened bird species.
9. Survey habitats of alpine and long-jawed *Galaxiids* for baseline resource information such as the extent of habitat, distribution and densities.
10. Support a programme of willow and other plant pest clearance around Lake Heron generally, in the Cameron Flat wetlands and other significant wetlands.
11. Classify land managed by the Department to best resolve protection and recreation objectives.
12. Encourage relevant authorities to either stop legal road to create reserves or bring Crown land strips under the management provisions of the Reserves or Conservation Acts, to provide legal protection for the lake-edge natural values. Consideration of stock watering needs will be required in this process.
13. Encourage the provision of legal foot access to and along lake edges where this does not already exist.

4.8.4 Thar and Other Wild Animals

Issue

Introduced ungulate animals, including domestic stock, adversely effect alpine plant communities through localised destruction of vegetation and preferential browsing of palatable plants. Thar exist in localised high concentrations within the Rangitata and Waitaki units. The Minister of Conservation approved a Himalayan thar management policy in 1991. The Himalayan Thar Control Plan 1993 implements the policy, under the Wild Animal Control Act 1977. The plan proposes a ceiling population of approximately 10,000 across the thar range, and specifies trigger densities when departmental control operations will be required. Some species provide a recognised recreational/commercial resource. Wild animal densities need to be controlled at levels that minimise their adverse effects on alpine plant communities. A thar liaison group has been established with representatives from recreational hunters, conservation groups and Ngāi Tahu to help implement the control plan.

Objective

- To reduce the impact of wild animals, particularly thar, on indigenous plant communities by managing them at specified density levels.

Implementation

The Conservancy will:

1. Implement the Himalayan Thar Control Plan 1993.
2. Intervene in thar control when thar numbers exceed the plan's intervention densities.
3. Monitor the effectiveness of hunting on deer and chamois populations and their adverse effects on indigenous plant communities.
4. Encourage research into the relationship between herbivores, vegetation condition and animal control.
5. Consult with the Thar Liaison Group and other interested organisations.

4.8.5 Staveley Lime Kilns

Issue

The historic Staveley lime kilns have recently been acquired by the Department. Proposed management to stabilise the kilns is based on a conservation plan prepared by a conservation architect (Cochran, 1991).

Objective

- To preserve the Staveley lime kilns as an example of historic relics of Canterbury's industrial past.

Implementation

The Conservancy will:

1. Implement the management requirements in the conservation plan for each kiln, to remove vegetation and stabilise stonework.
2. Fence the structures to restrict stock access.

4.8.6 Upper Rangitata/Rakaia

Issue

The remote mountain areas of the upper catchments have been identified by previous Government agencies and federated mountain clubs as having high potential for gazettal and management as a wilderness area. This would restrict aircraft access (see Map 10).

Having regard to the spectrum of recreational opportunities in Canterbury, and the size of lands managed by the Conservancy, this proposal is of considerable merit. Hunters may still be able to gain aerial access to hunt wild animals as part of the Wild Animal Recovery Scheme (WARS).

The large continuous area between the Aoraki/Mount Cook and Arthur's Pass national parks lacks a protected status to recognise its natural and recreational significance. As part of a wilderness investigation, a conservation park proposal will be considered.

Objectives

- To investigate wilderness status and, if agreed to by the Minister of Conservation, gazette a Wilderness Area for the upper catchments of the Havelock, Lawrence, Clyde and Rakaia rivers to protect their wilderness values.
- To investigate conservation park status for land managed by the Conservancy in the Upper Rangitata and Rakaia and, if agreed to by the Minister, gazette a conservation park.

Implementation

The Conservancy will:

1. Investigate wilderness status for the Adams Area, in conjunction with West Coast Conservancy, by undertaking the following (in order):
 - prepare a discussion document outlining the wilderness area options for land managed by the Department in the Adams Area
 - invite public submissions and provide for an oral hearing on the discussion document in accordance with sections 18 and 49 of the Conservation Act
 - forward the recommendation and summary of submissions to the Minister

- implement gazette action as required, following decisions made by the Minister
- 2. Investigate conservation park status for the Upper Rangitata and Rakaia, in conjunction with West Coast Conservancy, by undertaking the following (in order):
 - prepare a discussion document, outlining the protected area options for land managed by the Department between Aoraki/Mount Cook and Arthur's Pass national parks
 - invite public submissions and provide for an oral hearing on the discussion document in accordance with section 49 of the Conservation Act
 - forward the recommendation and summary of submissions to the Minister
 - implement gazette action as required, following decisions made by the Minister.
- 3. Over time, remove all the Department facilities from the upper catchments of the Havelock, Clyde, Lawrence and Rakaia rivers, within the proposed wilderness area.
- 4. Allow no further private or public huts in these upper catchments.
- 5. Restrict aircraft landings in the proposed wilderness area to the following activities only:
 - emergency uses
 - departmental management
 - wild animal control access between April and August
 - approved scientific research
- 6. Manage departmental lands downstream from the proposed wilderness area as a buffer zone according to the Wilderness Policy 1983. Areas may be added from the tenure review process.

4.8.7 Peel Forest

Issues

Peel Forest is an important focus for departmental management. The Peel Forest Park, which has scenic reserve status, is an outstanding area of relatively unmodified mountain and lowland podocarp forest. Associated with it is a well-developed track system and a camping-ground. Commercial camp-ground management is not a core departmental function and the Conservancy has leased out the Peel Forest Camp-ground. Ecological monitoring of the reserve is an ongoing activity of the Royal Forest and Bird Protection Society.

Objectives

- To protect and enhance the natural values and landscape of Peel Forest Park.
- To provide opportunities for the public to benefit from and use the park.

Implementation

The Conservancy will:

1. Control plant and animal pests in the scenic reserve to maintain and enhance its scenic values.
2. Undertake annual control of Clematis vitalba (old man's beard).
3. Maintain a network of public facilities in Peel Forest, including tracks, huts and bridges.
4. Lease or contract out the management of Peel Forest Camp-ground.
5. Consider additions to the scenic reserve of suitable adjacent land.
6. Advocate to and liaise with the Timaru District Council and the local community to protect the natural landscape character around Peel Forest.
7. Encourage ongoing monitoring by interested groups and individuals.

4.8.8 Mount Hutt

Issues

Mount Hutt ski field is the largest commercial ski field on land managed by the Department in Canterbury. It contains sizeable capital developments and facilities and has high visitor numbers. The access road and field require an annual maintenance programme that is approved by the Department. The operation of the ski field is a balance between providing recreational benefits and protecting natural and historic resources on the mountain. The Department manages the Mount Hutt Conservation Area (which contains the ski field) and the Pudding Hill Scenic Reserve. The adjacent Awa Awa Reserve is managed by the Ashburton District Council.

Objective

- To protect the natural and historic resources of Mount Hutt while allowing year-round recreational use.

Implementation

The Conservancy will:

1. Monitor the concession for Mount Hutt ski field ensuring the conditions that are established protect the natural and historic resources of the conservation area.
2. Require that public safety on the mountain is maintained.
3. Inspect and approve annual work programmes of the ski field operators.
4. Work with Mount Hutt ski field operators to provide conservation interpretation on the ski-field.
5. Foster year-round recreational useage of the land managed by the Department and the maintenance of the associated facilities (such as access tracks, picnic areas).

Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include:

- extensive lupin, gorse, willow and broom control on the Rangitata riverbed
- maintenance of low-priority departmental tracks and huts
- extensive interpretation at Mount Hutt

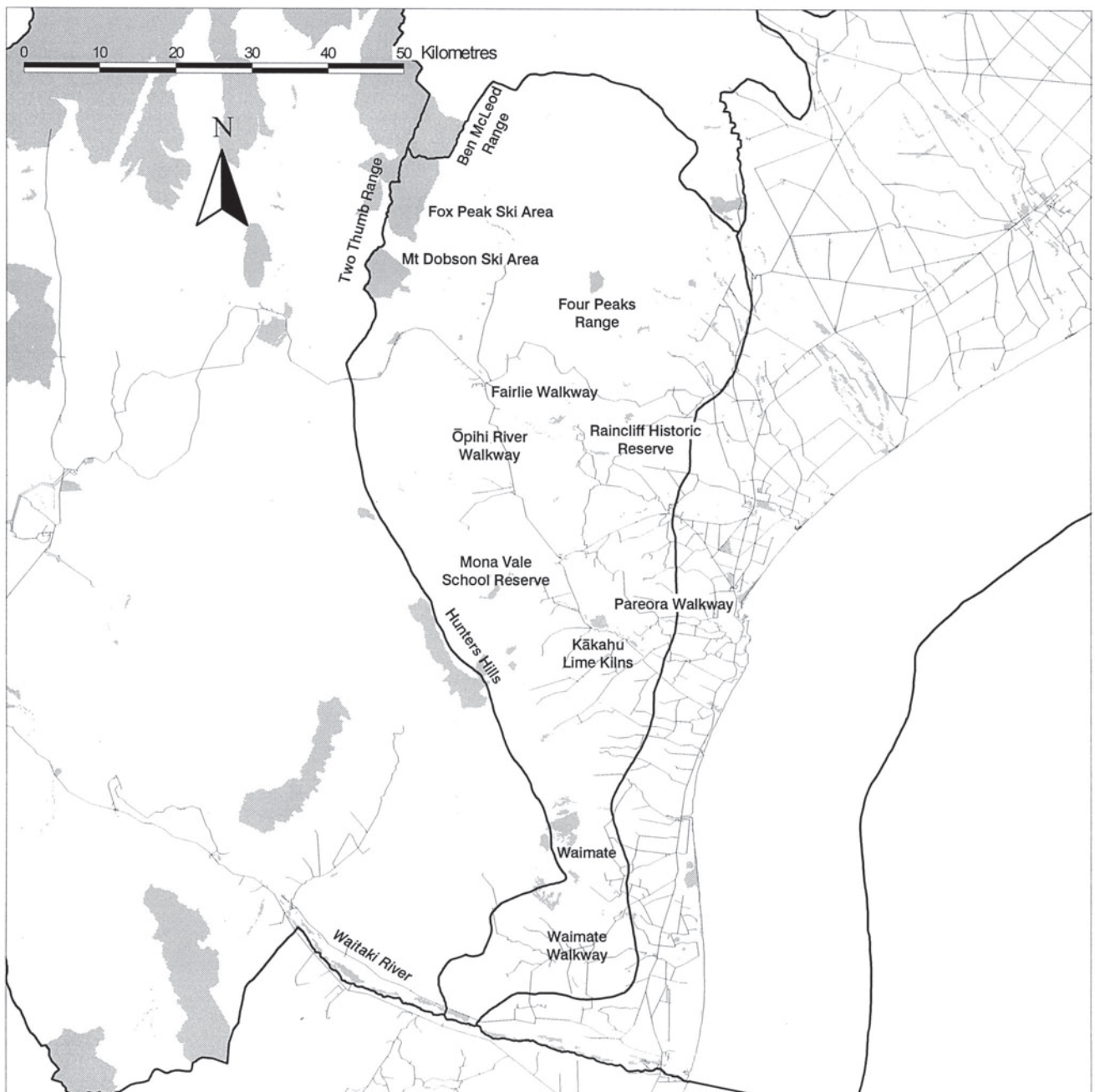
Table 10: Key Priorities for Rangitata Unit

Name	Issue	Method	Results Sought	See Activity Section
4.8.1 Ecosystems and Species	Much of the unit is ecologically surveyed and many areas warrant protection	1. Reservation 2. Covenant 3. RMA advocacy 4. Landholder liaison 5. Weed/pest control 6. Fencing 7. Tenure review	1. A range of significant ecosystems/ habitats and species identified and adequately protected 2. Self-sustaining species populations	5.1.4 Communication and Liaison 5.2.3 Land Ecosystems 5.2.4 Freshwater Ecosystems 5.2.6 Indigenous Species 5.2.8 Animal Pests and Wild Animals 5.2.9 Plant Pests and Exotic Plants
4.8.2 Mount Somers	Conservation of the geological, historical, botanical, wildlife, and recreational values of the Mount Somers area	1. Ecological survey 2. Weed/pest control 3. Fencing 4. Landholder liaison 5. Community walkway support	Integrated protection and enjoyment of the natural feature of Mount Somers	5.2.3 Land Ecosystems 5.2.6 Indigenous Species 5.2.8 Animal Pests and Wild Animals 5.2.9 Plant Pests and Exotic Plants 5.3.3 Recreation Facilities
4.8.3 High Country Lakes, Rivers and Wetlands	Protecting and enhancing the nature conservation and recreational values of the lakes, wetlands and rivers	1. Signs and interpretation 2. Weed/pest control 3. RMA advocacy 4. WCO 5. Enforcement 6. reservation 7. Tenure Review	The natural values and character of the high country lakes, rivers and wetlands are protected and enhanced	5.2.4 Freshwater Ecosystems 5.2.8 Animal Pests and Wild Animals 5.2.9 Plant Pests and Exotic Plants
4.8.4 Thar and other wild animal management	Impact of wild animals, particularly thar, on native vegetation	1. Recreational hunting 2. Commerical helicopter hunting 3. Monitoring thar numbers and vegetation conditions	Wild animal densities maintained at levels that do not have significant effects on native vegetation	5.2.8 Animal Pests and Wild Animals
4.8.5 Staveley Lime Kilns	The kilns are deteriorating	1. Conservation plan 2. Stabilisation work	Kilns stabilised in accordance with prescriptions in Conservation Plan	5.2.7 Historic Resources
4.8.6 Upper Rangitata/ Rakaia Management	1. Maintaining the wilderness values of the area 2. Protected status	1. Gazette wilderness area. 2. Investigate proposed conservation parks	1. Ensure that aircraft access and facility development is restricted. 2. Gazettal of a wilderness area 3. Conservation parks	5.3.2 Recreation Opportunities 5.5.2 Statutory Land Management
4.8.7 Peel Forest	Significant indigenous forest remnant and recreation area	1. Weed control. 2. Lease or contract out camp-ground management 3. Maintaining public recreation facilities 4. Additions to the park 5. RMA advocacy	1. Protect and extend the park 2. Recreational use 3. Community involvement	5.2.9 Plant Pests and Exotic Plants 5.3.3 Recreation Facilities 5.5.2 Statutory Land Management
4.8.8 Mount Hutt	Ski field management, recreation and interpretation facilities	1. Monitor concession conditions 2. Maintain tracks and other facilities	1. Protection of natural values 2. Concessionaire attention to public safety and enjoyment 3. Public access	5.3.3 Recreation Facilities 5.3.6 Interpretation 5.4.2.8 Ski Areas



Map 11

Pareora



- CMS Place Unit Boundaries
- Main roads
- Land managed by the Department



4.9 Pareora

Introduction

The unit comprises the mountains and foothills of the lower Two Thumb and Ben McLeod ranges, extensive rolling downlands and the Fairlie Basin. Indigenous plant communities are extensive at higher altitudes but only remnants exist in lowland areas.

Features and Issues

People Partnership

The area was periodically settled by Māori and was an important food-gathering area (mahinga kai). Because of these traditions, Te Rūnanga o Arowhenua and Te Rūnanga o Waihao retain a strong interest in the management of the area, and have expressed concerns about the preservation of rock drawings found on limestone outcrops throughout the downlands.

Relics from European settlement include buildings relating to the pastoral history of the area, lime kilns and sawmilling remnants. The dominant land use remains farming, with a significant and increasing proportion of exotic forestry. Service towns include Geraldine, Fairlie and Waimate.

Heritage Conservation

The higher mountains of the Two Thumb and Ben McLeod ranges were glaciated in the past, but permanent snow is no longer present. Indigenous tussock grasslands and alpine associations are extensive at higher altitudes in these mountains and on the Hunter Hills to the south (see 4.10.4 regarding a conservation park proposal for the Two Thumb Range). At lower altitudes, the vegetation is more modified and is often restricted to forest, shrubland and tussock remnants, particularly in areas less accessible to stock, such as gullies and roadsides. The presence of podocarp forest along the edge of the foothills is a notable natural feature. Specialised indigenous plant communities are associated with limestone on the downlands, and the Hunter Hills is the most seaward alpine area in Canterbury.

Bats are present in the area associated with the limestone areas, but are present in low numbers. The threatened Canterbury mudfish/kōwaro is found in slow-moving watercourses in the southern downlands.

Reserves and conservation areas are to be found scattered on the foothill edges, mostly in valleys that have escaped fire, logging and intensive grazing. These protected areas poorly represent the ecological character of this unit.

Human History

Māori limestone rock drawings, such as those at Raincliff, are a feature of the area. Management and protection of these sites is an ongoing issue that requires consultation with landholders, rūnanga and the New Zealand Historic Places Trust.

The Monavale School, now a reserve, dates from 1911, and reflects the growth in the family farms following the subdivision of Levels Station. Pioneer Park marks the site of the original homestead of Michael Burke, the European discoverer of the pass into the Mackenzie in 1855, known to Māori as Te Kopi Ōpihi (the gorge of the Opihi). The Kākahu lime kilns are a surviving remnant of a historic industry complex.

Recreation and Use

The Two Thumb Range provides the opportunity for skiing at the Mount Dobson and Fox Peak ski areas west of Fairlie. The mountains and foothills also provide a range of hunting options. Walking is catered for along four walkways (Ōpihi, Fairlie, Waimate and Pareora). Tramping, mountain-biking and opportunities for other activities are also available.

The numerous waterways provide many opportunities for sports fisheries and gamebird hunting. The development within the catchment of the Ōpuha dam will see the creation of an artificial lake, which may have some recreational value.



Areas Managed by the Department

The following areas managed by the Department are described in more detail in Volume 2; Schedule 2:

Name	Unit
Blandswood marginal strip	J37099
Part of Four Peaks Range tops	J37007
Hae Hae Te Moana Scenic Reserve	J37074
Matata Scenic Reserve	J39084
Monavale Historic Reserve	J38133
Mount Dobson Conservation Area	I37022
Mount Nimrod Scenic Reserve	J39087
North Waihao Bush	J40012
Órari Gorge Scenic Reserve	J37039
Ótaio Scenic Reserve	J39102
Pioneer Park, Geraldine Forest	J38053
Raincliff Historic Reserve	J38115
Talbot Forest Scenic Reserve	J38008
Two Thumb Range Conservation Area	I37003
Waihi Gorge Scenic Reserve	J37041, includes J37047, J37051, J37061

Key Priorities

4.9.1 Ecosystems and Species

Issues

The unit consists of five ecological districts. The only part that has been formally surveyed under the PNA programme is the southeast end of the Two Thumb Ecological District (see 5.5.4 Survey and Monitoring). While there are a number of protected areas, most are small and based on remnant communities. The full range of ecosystems and communities is poorly represented. It is important to protect each of these natural values as part of the protected area system. Areas managed by the Department are mostly of small size and scattered along the eastern flanks of the Hunter Hills.

No comprehensive ecological survey has been undertaken in this unit. While progress has been made in adding to the network of protected areas, a representative range of vegetation types and natural landscapes is not yet protected. Outside the protected area system, there is a need to afford basic protection to ecosystems that are poorly represented.

The area is significant for small populations of long-tailed bats/pekapeka, which inhabit crevices in the limestone of the area. More basic research is needed on bats to determine effective management requirements.

Objectives

- To identify the significant indigenous vegetation and threatened plant and animal species' of the Pareora unit.
- To use a range of effective methods to protect the indigenous biodiversity of the Pareora unit.
- To protect and enhance the viability of priority threatened species' populations and their habitat(s) in the Pareora unit.

Implementation

The Conservancy will:

1. Survey the ecological values of the following ecological districts, in accordance with priorities set in 5.5.4 (Survey and Monitoring):
 - Hunters
 - Fairlie
 - Orari
 - Geraldine
 - Waimate
2. Advocate for the protection of indigenous biodiversity, including the habitat of threatened species and the healthy functioning of ecosystems.



3. Negotiate with landholders to protect significant areas of indigenous vegetation and wildlife habitats (see 5.2.3 Land Ecosystems).
4. Undertake research and surveys to clarify the distribution, status, habitat preference and threats to the long-tailed bat.
5. Advocate for effective methods to avoid adverse effects to the habitat of the long-tailed bat.
6. Manipulate long-tailed bat habitat to enhance the species' population.
7. Undertake plant and animal pest control to reduce their threats to the long-tailed bat.
8. Maintain fencing of protected areas.

4.9.2 Rock Drawings

Issues

The drawings are largely found in fragile limestone environments that are vulnerable to damage, e.g. from stock rubbing against the limestone surface. Many sites are on private land and are not subject to the formal legal protection that may assist their long-term survival. The Raincliff Historic Reserve is managed by the Department.

Objective

- To co-operate with and assist rūnanga and the New Zealand Historic Places Trust in protecting rock art sites.

Implementation

The Conservancy will:

1. Co-operate in the development and maintenance of an accurate database, e.g. a photo library.
2. Continue site inspections and undertake maintenance work at rock art sites.
3. Work with rūnanga in the management and protection of rock art sites, in accordance with the outcomes of the Deed of Settlement (1997)

4.9.3 Wallabies

Issues

Since their introduction to the area about 1874, redneck wallabies have expanded their range and, while now relatively contained, do have potential to spread by either natural means or by illegal release. High wallaby densities cause browsing damage on indigenous plant communities and reduce agricultural productivity on farm lands. The ecological impact of wallabies can be considerable when they reach high population densities and at this point they need to be managed and controlled.

Objective

- To survey, monitor and control wallaby densities on land managed by the Department to levels that minimise their adverse effects on indigenous vegetation.

Implementation

The Conservancy will:

1. Implement and review a Conservancy wallaby control plan for land managed by the Department.
2. Encourage research on the population dynamics, dietary preferences and control options for wallaby.
3. Carry out annual survey and monitoring programmes.
4. Undertake control operations on land managed by the Department (including covenanted areas) when wallaby densities increase beyond target levels.
5. Continue to issue hunting permits throughout the wallaby range, particularly for the Waimate Forest area (Studholme, Hook Bush, Gunns Bush, Kelceys Bush, North Waihao and covenanted areas) where there is a joint permitting arrangement with the Waimate District Council.



Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include:

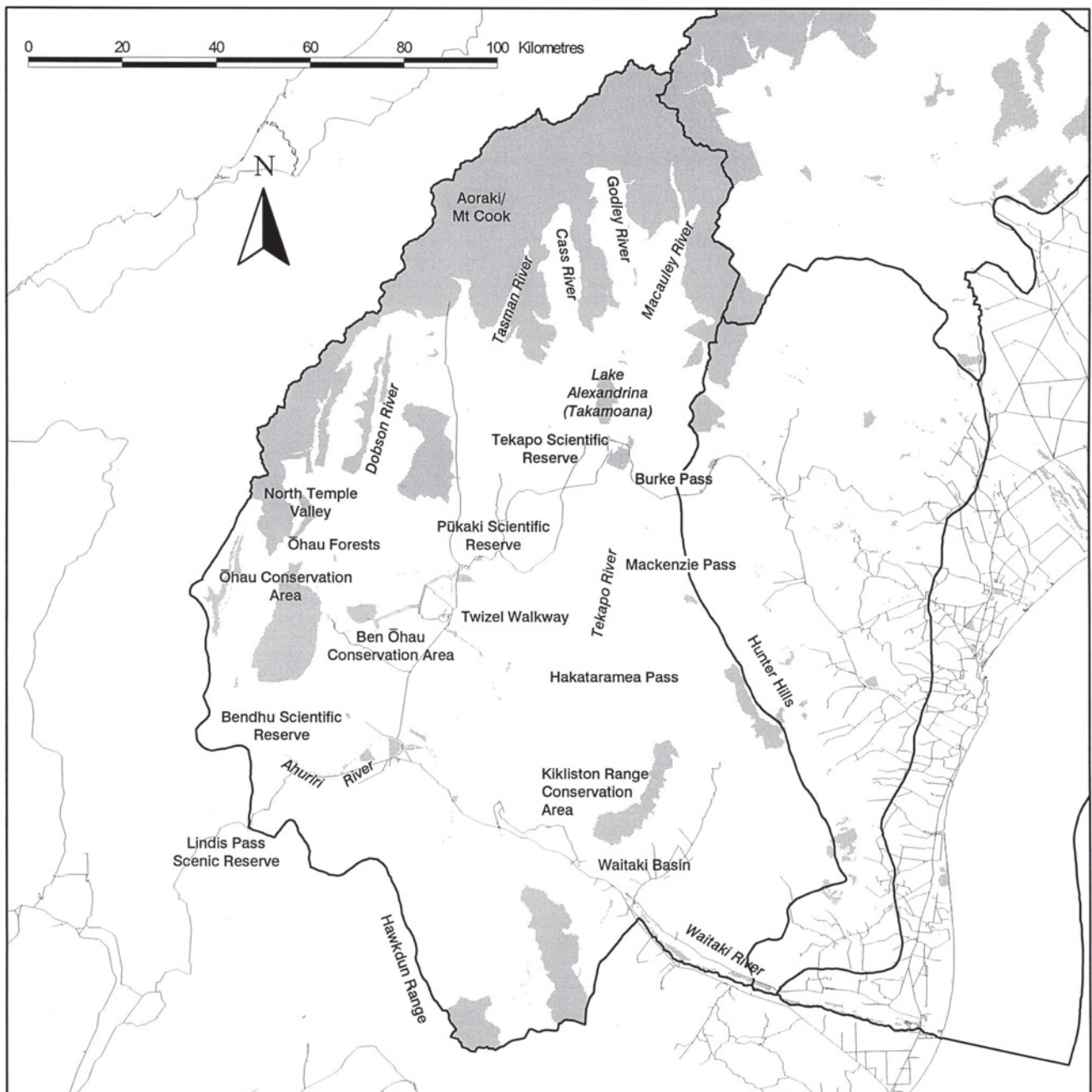
- wallaby eradication
- stabilisation of all rock drawing sites
- maintenance of low-priority tracks and huts
- maintenance of low-priority walkways

Table 11: Key Priorities for Pareora Unit

Name	Issue	Methods	Results Sought	Activity
4.9.1 Ecosystems and Species	Little of the area has been formally surveyed for its ecological values and even less has been protected	1. Ecological Survey 2. Reservation 3. Covenant 4. RMA advocacy 5. Landholder liaison 6. Weed/pest control 7. Fencing	1. A range of significant ecosystems identified and adequately protected 2. Self-sustaining species populations	5.1.4 Communication and Liaison 5.2.3 Land Ecosystems 5.2.6 Indigenous Species 5.5.4 Survey and Monitoring 5.5.5 Research
4.9.2 Rock drawings	Deterioration of rock drawings	1. Liaison with the rūnanga and Historic Places Trust 2. Recording 3. Stabilisation	Rock drawings stabilised within the constraints of natural processes.	5.1.2 Treaty Partnership 5.2.7 Historic
4.9.3 Wallaby control	Effects of wallabies on native vegetation	1. Conservancy wallaby control plan 2. Chemical control 3. Shooting	Formally protected Wallaby densities maintained at levels that do not have significant effects on native vegetation	5.2.8. Animal Pests and Wild Animals



Map 12 Waitaki



- CMS Place Unit Boundaries
- Main roads
- Land managed by the Department



4.10 Waitaki

Introduction

The Waitaki basin is a vast, open area surrounded by mountain ranges, including Aoraki /Mount Cook and the Southern Alps/Kā Tiritiri o te Moana. Landforms are often large and the vistas wide and uncluttered. The low-growing nature of the vegetation allows the landforms to dominate the landscape and define the horizons. The Aoraki/Mount Cook National Park and Ōhau Conservation Area form part of the South West New Zealand (Te Wahipounamu) World Heritage Area (see Map 13).

Aoraki/Mount Cook National Park has a legislative requirement for a management plan (see 6.1 Plans and Functional Strategies), and the review of the existing 1989 plan is due to begin in 1998.

The overall cover of tussock and grasslands gives a unity to much of the high country. Subtle changes in colour and composition emphasise changes in slope, aspect, soil and climate. Cultural elements such as roads and farm tracks, power pylons and canals, forest blocks, shelter belts and wilding trees tend to provide strong visual contrasts to the 'natural' landscape.

Features and Issues

People Partnership

Māori interest in the area is strong, not least because of the presence of Aoraki/Mount Cook. Waitaki is part of the takiwā (area) of three Papatipu Rūnanga (Arowhenua, Waihao and Moeraki).

The area is lightly populated with several small towns focused on farming and tourism. Pastoral runholders from primarily pastoral leasehold land are an important interest group, in that they manage large areas of land of natural, historic and recreational value. A major issue is the continued promotion of improved relations with the farming community.

Communication links with the local community will be maintained by regular contact by local staff in order to develop an open and friendly relationship. Such groups include Federated Farmers, local promotion organisations, landcare groups, local recreation clubs, Lupin Society of Omarama, ECNZ, Mount Cook Group Ltd, South Pacific Hotels Ltd, Mackenzie, Waitaki, and Waimate district councils, and local schools.

Aoraki/Mount Cook is subject to a Tōpuni under the Ngāi Tahu Claims Settlement Act 1998 (detailed in schedule 80 to that Act) in recognition of Ngāi Tahu's statement of cultural, spiritual, historic and traditional association with this mountain. A purpose of the objectives in this conservation management strategy is to ensure that Aoraki/Mount Cook is managed consistent with and in a way which recognises those special values.

Under section 240 of the Ngāi Tahu Claims Settlement Act 1998, Te Rūnanga o Ngāi Tahu and the Minister of Conservation have agreed specific principles and subsequent actions by the Director-General through the Department (having regard to those specific principles) which seek to avoid harm to or the diminishing of Ngāi Tahu's values relating to Aoraki/Mount Cook. Those specific principles are set out as follows:

- Encouragement of respect for Ngāi Tahu whanui association with Aoraki;
- Accurate portrayal of Ngāi Tahu whanui association with Aoraki; and
- Recognition of Ngāi Tahu whanui relationship with wāhi tapu including archaeological sites.

(See also Land Unit H36001, Aoraki/Mount Cook National Park, in Volume 2 for a description of this land unit, a statement of Ngāi Tahu values relating to the Tōpuni, and actions by the Director-General pursuant to the *Deed Of Settlement* (1997). These actions will be undertaken in relation to the specific principles published by the Minister of Conservation in the *New Zealand Gazette* 1999 pages 845-846 (18 March 1999).)

Heritage Conservation

The Waitaki is an extensive intermontane basin surrounded by mountain ranges rising to over 3000 metres in the west. Aoraki/Mount Cook is the best known of New Zealand's high mountains. All these mountains are composed primarily of sedimentary rocks (greywacke and argillite). There are extensive areas of permanent snow and ice along the main divide, with major glaciers at the headwaters of down country braided rivers and lakes. Further east, the ranges are characterised by extensive screes, but little contemporary glaciation.

The Waitaki Basin is a landscape of outstanding significance in both regional and national terms (Boffa Miskell Limited and Lucas Associates, 1993). Its character, size and scale are first experienced when entering the area by the Lindis, Hakataramea, Mackenzie, and Burke passes.



The southern ranges are transitional between sedimentary rocks (e.g. greywacke) and the schist of Central Otago, which is reflected by their more gentle topography and rounded summit ridges.

The intermontane basin is characterised by glacial terracing, moraines, lakes and kettleholes in the northwest, and extensive fluvio-glacial outwash surfaces to the south and east. Braided rivers and associated river terraces traverse this basin. Wetlands are no longer extensive and are mainly found along the western side of the basin.

Hydroelectric power developments have had a major modifying influence on the landscape. Lake levels and areas have been increased, canals created and river flows reduced or controlled. Losses of braided riverbed and wetland habitat have been severe. As a result of this habitat loss, an agreement arose out of the Waitaki River catchment ECNZ resource consents working party to a commitment from ECNZ to fund Project River Recovery (PRR). Under PRR, braided rivers and wetlands will be restored, and flood channels cleared on significant riverbeds.

Along the main divide substantial areas have little vegetation but there is a wide range of indigenous plant and animal communities. This reflects differences in substrate climate and altitude. Plant communities/habitats include alpine fellfields, herbfields, tussocklands, and subalpine tussocklands and shrublands. In valley headwaters there are some forests at lower altitudes; mostly beech with smaller areas of podocarp such as tōtara, celery pine/ mountain toatoa and cedar/ pāhautea.

Throughout the basin, indigenous plant communities have been modified by pastoralism. Short tussock grasslands characterise the Waitaki basin, though shrubs such as matagouri, *Coprosma* and *Olearia* occur over substantial areas, particularly around river terraces, fans and moraines. Celery pine/mountain toatoa, bog pine and tall tussock are much more restricted in distribution. Substantial wetland communities occur, including large areas of red tussock, associated with river systems or lakes. There are substantial areas of developed pasture and elsewhere, grasses and *Hieracium* are major components of the flora. Wilding trees are continuing to spread in the basin, and lupins, willow and other weeds are major problems in the braided river systems. Some of these river systems, such as Tekapo and Pūkaki, have been greatly modified by plant pest invasion and flow modification, seriously jeopardising habitats of braided river birds such as black stilt/kaki and wrybill plover/ngutupare.

The eastern and southern ranges support mainly indigenous plant communities modified by human influences, particularly burning and pastoral grazing. Tussocklands are consequently the dominant vegetation type. Tall tussocklands predominate, with fellfields and cushion communities in alpine areas of the southern ranges. Short tussock communities dominate the lower altitudes. Mixed shrubland covers some valley floors, lower slopes and bluffs. Exotic plants tend to be most dominant on lower slopes and valley floors, with some developed pasture, particularly on fans and terraces. Major plant pests are *Hieracium* species, wilding pines and broom, with nodding thistle of concern locally.

The Hakataramea Valley is located in the southeast corner of the unit. It is predominantly tussock grassland, but the degree of agricultural modification is greater at lower altitudes.

A wide range of indigenous animal communities occur throughout the Waitaki, including invertebrates in all habitats, and birds within open country, bush and braided riverbeds. Skinks and geckos are found throughout except at higher altitudes and in main divide areas. Indigenous fish, e.g. galaxids, are found in many lakes, rivers, streams and wetlands.

Introduced animals are common, including thar, deer, chamois, rabbit, hare, possum, mustelid and feral cats. Wallaby and pigs are found locally in eastern areas. High rabbit numbers contribute to serious vegetation depletion and localised soil erosion.

Threatened biota include a whipcord hebe, *Hebe cupressoides*; climbing broom; *Carmichaelia curta*, *C. hollowayi* and *C. Kirkii*; indigenous mistletoe, *Alepis flavida* (yellow), *Peraxilla tetrapetala* (red); *Pittosporum patulum*; the robust grasshopper, *Brachaspis robustus*; and the birds black-fronted tern/tarapirohe, wrybill plover/ngutupare and black stilt/kaki.

Human History

Aoraki/Mount Cook is of special significance to Ngāi Tahu, which is reflected in their statement of cultural, spiritual, historic and traditional association provided in the Tōpuni associated with the mountain. Refer to Volume 2, Land Unit H36001, Aoraki/Mount Cook National Park, for the full statement of Ngāi Tahu values.

Ruataniwha (Ben Ōhau) also has cultural significance to Ngāi Tahu. There are a number of significant sites of Māori history but few are formally recognised or protected.

European history is closely associated with pastoralism, e.g. spade-line boundaries, boundary huts and homesteads. Climbing has its greatest focus in the Aoraki/Mount Cook area, though there was also extensive exploration and climbing in other catchment headwaters in the late 1800s to the mid-1900s.



Recreation and Use

Recreational use is extensive and varied. In the Southern Alps/Kā Tiritiri o te Moana and ranges it includes mountaineering, skiing, tramping, hunting and tourist activity. Aoraki/Mount Cook National Park is regarded as the premier alpine climbing area in Australasia. Aoraki/Mount Cook Village is the focus of much of the tourism activity in the area and 70 per cent of the 200,000 visitors per year to the village are international visitors.

Recreation in the Waitaki basin includes fishing, boating, canoeing, waterfowl shooting, four-wheel driving, camping and walking; as well as less common pursuits such as bird-watching, photography, gliding, wind-surfing, and mountain-biking.

Camping, boating and water-skiing are common on the unit's lakes and rivers and Lake Ruataniwha has been developed as a national rowing venue.

Commercial recreation and tourism in the Waitaki unit centres around aerial sightseeing and skiing, mountain guiding, fishing, hunting, ballooning, short tour/walk operations and, increasingly, nature-based tourism.

The basin has been a focus for local visitors but a growing number of international visitors are becoming aware of the opportunities for activities such as the 'wilderness angler experience'.



Areas Managed by the Department

The following areas are described in more detail in Volume 2, Schedule 2:

Name	Unit
Ahuriri (Forest) Conservation Area	G38001
Aoraki/Mount Cook National Park	H36001
Ben Omar Swamp	H39095
Bendhu Scientific Reserve	H39017
Birch Hill Flat	H37018
Burke Pass Scenic Reserve	I38011
Cass River Delta Conservation Area	I37005
Dobson (Forest) Conservation Area	H37007
Dobson Conservation Area (upper)	H36031
Dusky Run Conservation Area	H38031
Ferintosh Retirement Area	H37017
Godley Riverbed Conservation Area, true right of lower river	I36005
Hopkins, Huxley Conservation Area	H37008, H37009, H37014
Hunter Hills Conservation Area, Waihao River north branch	J39134
Jollie and Cass Conservation Area	I36002
Kirkliston Range Conservation Area	I39004
Lake Alexandrina Scenic Reserve	I37008
Lake Pūkaki Terminal Moraine Conservation Area	H38009
Lake Tekapo Scientific Reserve	I37050
Lindis Pass Scenic Reserve	G40001
Lower Ahuriri Riverbed Conservation Area	H39021, includes H39023, H39025, H39026
Lower Waitaki Riverbed Conservation Area	I40001 (also includes I40006, I40007, I4009, I40010, I40032)
Micks Lagoon Wildlife Reserve (proposed)	I37057
Mount Gerald Two Thumb Conservation Area	I36007
Mount Ida Conservation Area	H41001
North Waihao River Marginal Stips	J40092 (also includes J40091, J40093, J40094)
Ōhau Conservation Area (Freehold Creek)	H38033
Ōhau Conservation Area (Hopkins/Huxley)	H37010
Ōhau Conservation Area (Ōhau Range)	H38016, includes H38017
Ōhau Conservation Area (upper Maitland)	H38032
Ōhau Conservation Area (Temple)	H38035
Ōhau Terminal Moraine Scenic Reserve	H38021
Round Hill Forest	H37005
Ruataniwha Conservation Area, Ben Ōhau	H38058
St Mary's Range Retirement Area	I40072
Studholme Management Area	J40001
Two Thumb Conservation Area (Richmond Range)	I37004



Key Priorities

4.10.1 Landscape Protection

Issues

The Waitaki landscape is vast, open, and exhibits a distinctive tussock grassland character; it exhibits an outstanding character as a whole. It attracts a high number of visitors to the area and is sensitive to inappropriate development. Exotic tree planting, wilding tree spread and tracking will require careful management. Development needs to ensure that the wider landscape values are protected, and that the character of major travel routes is maintained.

Objective

- To identify, maintain and seek to enhance the natural landscapes and natural landscape values of the Waitaki unit.

Implementation

The Conservancy will:

1. Seek, through appropriate methods such as tenure review and district plans, to protect, maintain and enhance the heritage landscape and heritage landscape values of the unit.
2. Advocate, assist and encourage the Mackenzie, Waitaki and Waimate district councils to include in their district plans methods that avoid, remedy or mitigate adverse effects on outstanding natural features and landscapes, particularly the Lindis, Hakataramea and Mackenzie passes and the Ahuriri Valley.
3. Encourage the Mackenzie, Waitaki and Waimate district councils to include methods in their district plans that will avoid, remedy or mitigate adverse effects of developments on natural and historic landscape values and, by adopting appropriate methods, to manage land use change.
4. Provide advice on land management methods that will prevent land use changes from having adverse effects on landscapes.

4.10.2 Ecosystems and Species

Issues

The unit consists of eighteen ecological districts, nine of which have been formally surveyed under the PNA programme (see 5.5.4 Survey and Monitoring). The three unsurveyed ecological districts contain significant areas managed by the Department.

The protected natural area system of the Waitaki is unrepresentative, lacking in coverage of significant indigenous ecosystems and with some areas yet to be surveyed.

Tenure review of pastoral leases (see 5.2.3 Land Ecosystems) is an active process in this unit, providing opportunities for natural values protection.

Lake Alexandrina (Takamoana) is a very popular fishing and holiday area with high wildlife and nature conservation values (Ward and Stewart 1989). The eutrophication of the lake by fertiliser use and development in the catchment is the greatest lake management issue and it requires integrated management.

The braided riverbeds of the Waitaki basin and their wading bird species, particularly the black stilt/kaki, are a focus for Conservancy species management in the unit.

Future species work will expand to include threatened lizard, grasshopper, fish and plant species.

The introduction of rabbit calicivirus diseases (RCD) has required the Department to implement a response plan (Aikman, 1997) to mitigate the potential threats to indigenous species.

Objectives

- To identify the significant indigenous vegetation and threatened species of the Waitaki unit.
- To use a range of effective methods to protect the indigenous biodiversity of the Waitaki unit.
- To protect and enhance the viability of priority threatened species' populations and their habitat(s) in the Waitaki unit.



Implementation

The Conservancy will:

1. Survey the ecological values of the following ecological districts, in accordance with priorities set in 5.5.4 (Survey and Monitoring):
 - Godley
 - St Bathans
 - St Mary
 - Kirkliston
 - Hakataramea
2. Negotiate with landholders to protect significant areas of indigenous vegetation/wildlife habitat (see 5.2.3 Land Ecosystems).
3. Continue research on methods to restore braided riverbeds, especially on the Ahuriri, Lower Ōhau, Tasman and Tekapo rivers.
4. Maintaining research, monitoring and indigenous vegetation enhancement programmes on Tekapo Scientific Reserve.
5. Co-ordinate a working party to recommend methods to protect and enhance Lake Alexandrina's natural values.
6. Negotiate any future tenure review exercise with Glenmore and Mt John stations to protect the catchment of the Lake Alexandrina from the adverse effects of agricultural development.
7. Advocate for effective methods in regional and district plans that enhance the life-supporting capacity of the Lake Alexandrina ecosystem.
8. Encourage the Mackenzie District Council to stop the lake-edge legal road in favour of reserve status to provide legal protection of Lake Alexandrina's lake-edge.
9. Advocate for the protection of indigenous biodiversity, including the habitat of threatened species and the healthy functioning of ecosystems.
10. Undertake research/survey to clarify the distribution, status, habitat preferences and threats of the following species in the unit:
 - Reptiles
 - scree skink
 - striped skink
 - Invertebrates
 - robust grasshopper
 - Birds
 - black stilt/kākī
 - wrybill/ngutupare
 - kererū/pigeon/kūkupa
 - southern crested grebe/kāmana
 - kea
 - black-fronted tern/tarapirohe
 - banded dotterel/pohowera
 - rock wren
 - Fish
 - short-jawed kōkopu
 - Plants
 - Hebe cupressoides
 - Carmichaelia kirkii
 - Tupeia antarctica
11. Advocate effective means to avoid adverse effects to the habitat of the following threatened species in Canterbury Regional Council and district council plans:
 - black stilt/kākī
 - wrybill/ngutupare
 - black-fronted tern/tarapirohe
 - banded dotterel/powhera
12. Manipulate black stilt habitat to enhance their population.
13. Undertake captive rearing of black stilt/kākī.



14. Undertake plant and animal pest control to reduce their threat to:
 - black stilt/kaki
 - wrybill/ngutupare
 - black-fronted tern/tarapirohe
 - banded dotterel/pohowera
15. Seek formal habitat protection for wading birds generally.
16. Use publications, interpretive material, the media and personal contact to outline management issues associated with the kea.
17. Encourage the Central South Island Fish and Game Council to maintain Canada goose numbers in accord with the South Island Canada Goose Management Plan, 1995.
18. Seek the protection of indigenous biodiversity through the tenure review process.
19. Continue to implement the RCD response plan (Aikman, 1997) through developing best practice procedures.

4.10.3 Project River Recovery

Issues

Currently braided rivers and their beds in the Waitaki have little formal protection, by either land status or Resource Management Act methods, with the exception of the Ahuriri. These areas represent important wildlife and plant habitats and are a unique feature of the South Island.

They are threatened by plant pests, inappropriate recreational use, unsuitable farming practices, river control works and predators. Project River Recovery began in 1992, utilising ECNZ funding to restore and improve river and wetland habitats in the Upper Waitaki catchment.

Objectives

- To improve the range of viable riparian habitats for indigenous species in the Mackenzie Basin.
- To encourage landholders to co-operate in protecting braided river systems.

Implementation

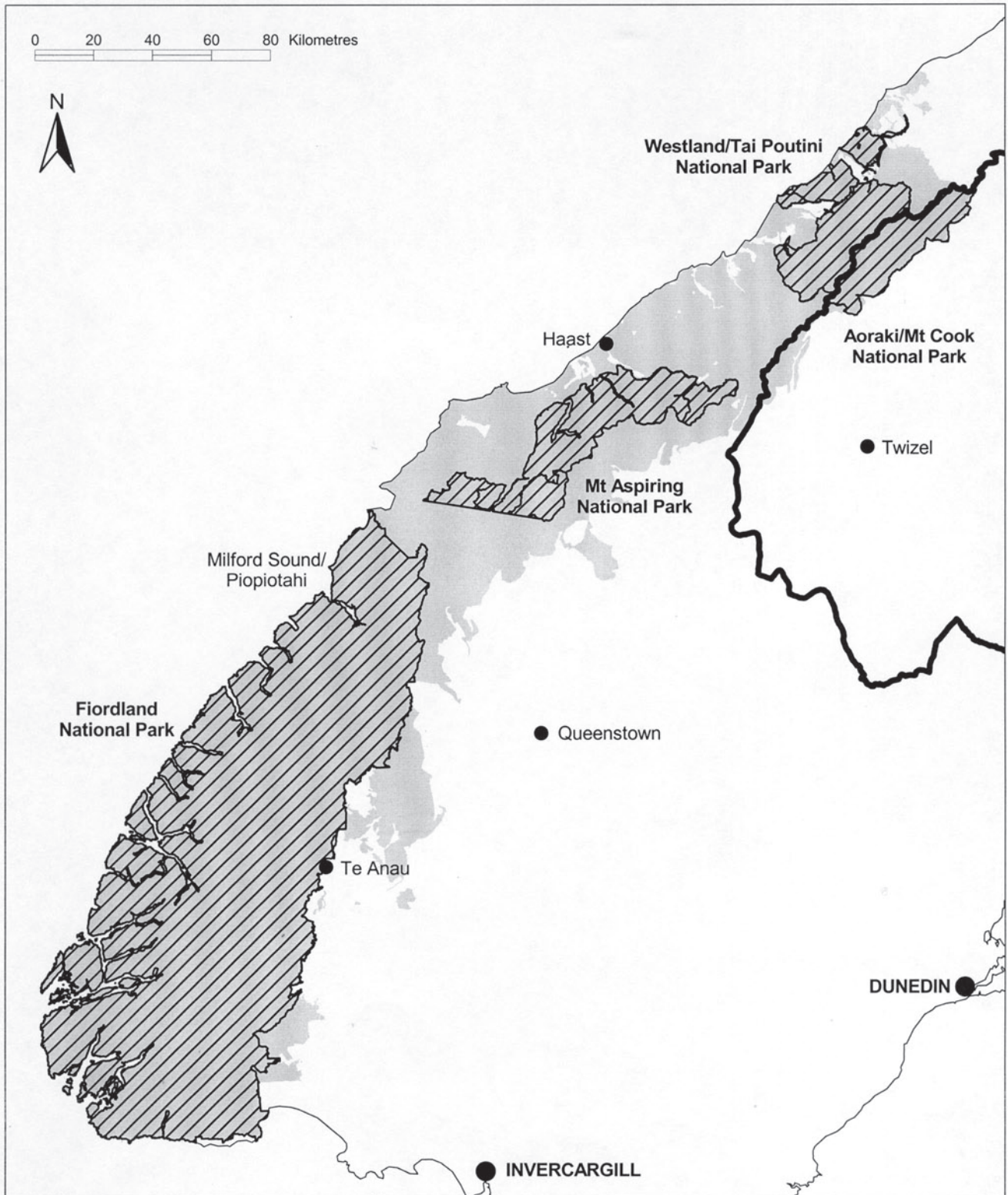
The Conservancy will:

1. Manage and advocate management of all braided river systems for the protection of their natural values.
2. Implement the goals and objectives of Project River Recovery as identified by agreement between ECNZ and the Department.
3. Control and, where possible, eradicate plant pest species on braided rivers and wetlands where natural values are threatened.
4. Develop effective relationships with landholders, the community and councils, to develop a mutual understanding of the issues of concern for the Waitaki unit.
5. Advocate under the Resource Management Act the need to identify and avoid adverse effects on areas of significant wildlife habitat value; including through an Ahuriri River section of the Canterbury Natural Resources Regional Plan, and implementing the Ahuriri Water Conservation Order.
6. Seek gazettal as conservation areas or as reserves of Crown riverbed with high wildlife value.



Map 13

Southwest New Zealand (Te Wāhipounamu) World Heritage Area



World Heritage Area

National Park



Canterbury Conservancy Boundary





4.10.4 Statutory Land and Water Management

Issues

The Ōhau area is a focus for a variety of recreational uses. These are expanding and the area is recognised as providing good alternatives to the lower level areas at Aoraki/Mount Cook. Land managed by the Department in this area will increase substantially over the next five years with the surrender of land from Crown pastoral leases. Better integrated management and a higher public profile may be achieved by establishing a conservation park. Areas of forest within the Ahuriri and Huxley catchments are within the South West New Zealand (Te Wahipounamu) World Heritage Area (SWNZWHA) (see Map 13). Lake Ōhau remains a largely unmodified high country lake in the Waitaki catchment (see Lake Ōhau Coastal Reserves Investigation 1981). This is not recognised through any current protection methods.

Objectives

- To investigate conservation park status for the areas of land managed by the Department in the Ōhau-Ahuriri area, Two Thumb Range and Hawkdun-Ōteake area and, if agreed to by the Minister, gazette relevant conservation parks.
- To increase recognition of the international status of the South West New Zealand (Te Wahipounamu) World Heritage Area.
- To legally protect Lake Ōhau and its shoreline.

Implementation

The Conservancy will:

1. Investigate and action conservation park status through the following procedures (in order):
 - prepare a discussion document or documents outlining the protected area options for land managed by the Department in the Ōhau-Ahuriri area (Ōhau and Ben Ōhau Ranges, Ahuriri, Huxley, Hopkins and Dobson valleys), the Two Thumb Range, and the Hawkdun-Ōteake area (Hawkdun, Ewe, Cuthbert and St Mary's Ranges), the last in conjunction with Otago Conservancy.
 - invite public submissions for oral hearings on the discussion documents (in accordance with section 49 of the Conservation Act)
 - forward the recommendations and summaries of submissions to the Minister
 - implement gazette actions as required, following decisions made by the Minister
2. Consider adding to the SWNZWHA land managed by the Department with high natural, historic or recreational value.
3. Manage the parts of South West New Zealand World Heritage Area (SWNZWHA) that fall within the Conservancy, according to cross-conservancy guidelines.
4. Promote a Water Conservation Order and a lakeshore reserve for Lake Ōhau to protect the lake's outstanding natural values and its environs from modification, while recognising current lake level management by ECNZ in accordance with the Resource Management Act.
5. Promote effective RMA methods to avoid adverse effects on the Lake Ōhau and its catchment to maintain and enhance its natural values.

4.10.5 Wilding Trees

Issues

Wilding trees threaten natural values by displacing tussock grasslands, and enclosing open landscape values. Currently there are large areas of wilding trees establishing throughout the Waitaki, and the problem is likely to increase as new areas of exotic conifer forest are developed. At present there is no legal requirement for control and only minimal control is undertaken.

Objectives

- To prevent the loss of natural and landscape values from wilding trees on land managed by the Department.
- To liaise with land managers and regulatory agencies to control and contain wilding trees.



Implementation

The Conservancy will:

1. Control, contain and, where possible, eradicate wilding trees on land managed by the Department, including the Kirkliston Range, Jollie and Cass, Ōhau and Ruataniwha conservation areas; the proposed Braemar conservation area; the Pūkaki and Bendhu Scientific Reserves; and Aoraki/Mount Cook National Park.
2. Assist in establishing co-operative wilding tree control programmes with landholders, Canterbury Regional Council, Mackenzie and Waitaki district councils, Office of Crown Lands, New Zealand Defence Force, other land managers and community groups to protect natural and historic resources in the Waitaki.
3. Advocate that district and regional plans include objectives, policies and methods to prevent increases in wilding pine spread; and that they require any proposed activity or development to avoid, remedy or mitigate the adverse effects of wilding tree spread.

4.10.6 Rabbits and Thar

Issues

There are a number of introduced animals in the Waitaki; however, rabbit and thar are priorities for the Conservancy. Rabbits threaten natural values on land managed by the Department and unalienated Crown land (areas such as riverbeds and lake margins). The Waitaki is recognised as a rabbit-prone area and sustained control to maintain low numbers is essential. Since the release of rabbit calicivirus disease (RCD), the Department has actioned a response plan (Aikman, 1997) to deal with the varying potential resultant threats (see 4.10.3 Ecosystems and Species). Thar, above certain densities, are especially destructive of alpine and subalpine plants.

Objective

- To reduce and maintain rabbit and thar densities to levels that ensure their adverse effects on natural values are minimised.

Implementation

The Conservancy will:

1. Control and monitor rabbits on land managed by the Department to below level 3 on the McLean's scale by effective control methods.
2. Co-operate with neighbouring landholders in rabbit control.
3. Advocate appropriate land management to limit the spread of rabbits.
4. Implement the requirements of the Himalayan Thar Control Plan 1993 (see 5.2.8 Animal Pests and Wild Animals).
5. Encourage research into the relationship between herbivores, vegetation condition and animal control.

4.10.7 Recreation and Access

Issues

Recreational use is extensive and varied, including a large number of concessionaire operations. Conflicts can arise with regard to access and between different types of recreation, both private and commercial. Conflicts can also occur with habitat conservation (for example, vehicles on braided riverbeds during the nesting season for birds).

Tenure review of pastoral leases (see 5.2.3 Land Ecosystems) is an active process in this unit, providing for formal protection of recreational opportunities.

Objectives

- To maintain and improve existing facilities and limit their and their users' adverse effects on natural and historic resources.
- To provide new recreational facilities and opportunities by the Department and other organisations and concessionaires where natural and historic resources and cultural values are not compromised.
- To liaise with adjacent landholders to resolve conflicts over access for recreation to land managed by the Department.



Implementation

The Conservancy will:

1. Continue to upgrade existing short walking tracks to high standards suitable for national and international visitors, for example, the Hooker, Kea Point and Wakefield tracks.
2. Liaise with other local organisations wishing to provide walking and tramping opportunities e.g. Twizel, Tekapo and Kurow walkways and the proposed Ōhau alpine walk.
3. Maintain the White Horse Hill (Aoraki/Mount Cook National Park) and Temple (Ōhau conservation area) camping areas as standard, self-registration camping areas, while minimising any adverse environmental effects.
4. Recognise that heli-skiing is an appropriate use of the following areas and consider all proposals in an integrated manner (including the cumulative adverse effects of any proposal):
 - the Tasman Valley (AMCNP)
 - the lower Murchison Valley (AMCNP)
 - the Liebeg Range
 - the Two Thumb Range
 - the Ruataniwha Conservation Area, Ben Ōhau

Note: Ski touring is a popular activity in the upper Two Thumb Range. Any proposal to heli-ski the area will need to carefully consider its potential effects on other visitors etc. as required by Part IIIB of the Conservation Act (see 5.4.2.9 Aircraft).
5. Investigate the possibility of upgrading the North Temple track (Ōhau Conservation Area) as a high-grade short walk opportunity.
6. Advocate for the appropriate establishment of access easements to all retirement areas from lands managed by the Conservancy throughout the Waitaki.
7. Promote the use of the Braided River Care Code in the Waitaki.
8. Consult with aircraft operators and all relevant agencies (including the Mackenzie District Council) to develop a strategy for managing aircraft noise. Appropriate methods will be adopted to ensure that operators avoid, remedy or mitigate adverse effects (including cumulative effects) of aircraft noise on visitors.
9. Liaise with West Coast Conservancy to restrict aircraft landings in the Hooker-Landsborough area to protect the natural quiet and solitude of the valleys, the Hooker Valley being in Canterbury and the Landsborough being in West Coast (see 5.4.2.9 Aircraft). The Conservancy will also liaise with the Civil Aviation Authority to avoid, remedy or mitigate the noise effects of aircraft movements in such areas.
10. Seek the provision and protection of recreational opportunities through the tenure review process.
11. Manage concessions in accordance with 5.4.2 Concessions General.

4.10.8 Interpretation and Information Services

Issues

A range of opportunities exists for the development of a number of interpretation sites and short walks in the Waitaki. As the tourism market increases this development would provide alternative and expanded opportunities outside of Aoraki/Mount Cook. The previously Conservancy-managed Twizel Visitor Centre is now run by the Twizel Community and Development Board as the Mount Cook-Mackenzie Visitor Information Centre. The Mount Cook/Aoraki Visitor Centre needs upgrading (see 4.10.9 Aoraki/Mount Cook Village).

Objectives

- To provide a limited departmental role in the Mount Cook-Mackenzie Visitor Information Centre.
- To maintain and upgrade the Aoraki/Mount Cook Visitor Centre with the assistance of the community and other interests.
- To provide quality interpretation at priority sites in the Mackenzie basin.
- To increase public awareness of the natural, historic and cultural values of the Waitaki.
- To work with other agencies and the community to provide conservation and recreation information.



Implementation

The Conservancy will:

1. Support the Mount Cook–Mackenzie Visitor Information Centre by providing information and assistance with displays.
2. Upgrade the Aoraki/Mount Cook Visitor Centre (see 4.10.9 Aoraki/Mount Cook/Aoraki Village).
3. Provide fully integrated interpretation and short walk facilities at priority Mackenzie basin sites, including along State Highways 80 and 8, Lake Ōhau, Lake Tekapo Scientific Reserve, Pūkaki Scientific Reserve, Lindis Pass and Lake Alexandrina (Takamoana).
4. Support a publication about the history of the Waitaki to identify and interpret significant historic places along local roads and highways and clearly identify these sites.
5. Undertake an education programme to increase awareness of threats to habitats, species, historic sites and landscapes in the Waitaki.
6. Maintain and interpret the historic bullock snigging track in Ōhau Conservation Area (Freehold Creek).

4.10.9 Aoraki/Mount Cook Tōpuni and Village

Issues

An outcome of the Ngāi Tahu Claims Settlement Act 1998 is the Aoraki/Mount Cook Tōpuni, covering the Mount Cook Range from the Main Divide, over Aoraki/Mount Cook to Mount Wakefield, and to the Ranges' foot along the edges of the Tasman and Hooker valleys.

Aoraki/Mount Cook Village is a major tourist destination located in the Aoraki/Mount Cook National Park, part of a World Heritage Area. The village and facilities are considered substandard and need upgrading. The current visitor centre does not adequately provide the interpretative information and retailing services expected of such a location. Alpine and climbing history and archives are poorly protected and interpreted for New Zealanders and overseas tourists.

The *Mount Cook National Park Management Plan* (1989) is under review (1999) and will be required to specifically address the issues of the Aoraki/Mount Cook Village management and actions required as a result of the Aoraki/Mount Cook Tōpuni status.

Objectives

- To avoid harm to, or the diminishing of, Ngāi Tahu values relating to the Aoraki/Mount Cook Tōpuni.
- To upgrade facilities at Aoraki/Mount Cook Village to an international standard that is consistent with the park's natural values, with the co-operation and support of Ngāi Tahu, and commercial, community and recreation groups.

Implementation

The Conservancy will:

1. Take the express actions agreed and recorded in Attachment 12.132 of the *Deed of Settlement* 1997 and which have been subsequently published in the *New Zealand Gazette* 1999 pages 845-846 (18 March 1999). See Volume 2, Land Unit H36001, Aoraki/Mount Cook National Park, for the full statement of actions directed at the Director-General of Conservation having regard to the specific principles and significance to Ngāi Tahu.
 2. Use the *Aoraki/Mount Cook Village development issues and options report* (1997) as the starting point for ongoing management of the Aoraki/Mount Cook Village.
 3. Consider the establishment of an appropriate Aoraki/Mount Cook Village management structure in conjunction with Te Rūnanga o Ngāi Tahu, the Mackenzie District Council and concessionaires. This will include public consultation.
 4. Fund village maintenance and development within the constraints of an operative village section of a Aoraki/Mount Cook National Park Management Plan
 5. Monitor visitor needs within the village to aid further re-development planning.
 6. Redevelop the Aoraki/Mount Cook Visitor Centre to meet anticipated visitor numbers and demands.
 7. Ensure that the reviewed Aoraki/Mount Cook National Park Management Plan specifically addresses the requirements of the Aoraki/Mount Cook Tōpuni and other provisions of the Ngāi Tahu Claims Settlement Act 1998, and issues arising from management of the Aoraki/Mount Cook Village.
- See also Volume 2, Schedule 2, (H36001) Aoraki/Mount Cook National Park.



Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include:

- negotiated protection for all significant habitats
- fully funded research programme on Tekapo Scientific Reserve
- rabbit fencing for all key priority sites
- wilding pine control for all land managed by the Department



Table 12: Key Priorities For Waitaki Unit

Name	Issue	Methods	Results Sought	Activity
4.10.1 Landscape Protection	Developments that detract from the natural landscape character, especially along travel corridors	1. RMA advocacy 2. Landholder and community liaison and awareness 3. Tenure review	Landscapes protected by landholders and district councils	5.1.4 Communication and Liaison 5.2.2 Landscape
4.10.2 Ecosystems and Species	Ongoing species and habitat loss as well as incomplete survey coverage	1. Ecological survey 2. Reservation 3. Covenant 4. RMA advocacy 5. Landholder liaison 6. Pest control 7. Fencing	1. The range of habitats fully surveyed and adequately protected. 2. Self-sustaining species populations	5.2.3 Land Ecosystems 5.2.6 Indigenous Species 5.2.8 Animal Pests and Wild Animals 5.2.9 Plant Pests and Exotic Plants 5.5.4 Survey and Monitoring
4.10.3 Project River Recovery	Loss of natural values and inadequate legal protection	1. Implement recovery programme objectives 2. Encourage community support 3. Advocacy and liaison 4. Gazette riverbed areas	1. Habitat rehabilitated 2. Key riverbeds legally protected	5.2.3 Land Ecosystems 5.2.4 Freshwater Ecosystems 5.5.2 Statutory Land Management
4.10.4 Statutory Land and Water Management	Legal protection and integrated management needed to reflect natural values	1. Investigate Lake Ōhau WCO 2. Investigate and, if supported, implement conservation park status areas 3. Inter-conservancy liaison	1. Lands managed by the Conservancy in the Ōhau-Ahuriri, Two Thumb Ranges and the Hawkdun-Oteake areas protected and recognized 2. SWNZWHA managed consistently	5.1.4 Communication and Liaison 5.2.4 Freshwater Ecosystems 5.5.2 Statutory Land Management
4.10.5 Wilding Trees	Threat to conservation and landscape values	1. RMA methods 2. Active management by agencies, including the Department	Protection of ecological, historic and cultural values	5.1.3 Community Participation 5.2.9 Plant Pests and Exotic Plants
4.10.6 Rabbits and Thar	Threat to nature conservation and landscape values	1. Advocacy and liaison 2. Rabbit control 3. Implement thar control plan	Populations maintained at a level that protects natural and historic resources	5.2.8 Animal Pests and Wild Animals
4.10.7 Recreation and Access	1. User conflicts 2. Increased visitors 3. Allowing for appropriate access	1. Improve tracks, huts, camp sites 2. Manage heli-skiing and aircraft access concessions 3. Review Aoraki/Mount Cook National Park Management Plan 4. Negotiate access agreements	1. Conflicts managed 2. A range of recreational opportunities provided	5.3.2 Recreation Opportunities 5.3.3 Recreation Facilities 5.3.4 Visitor Impacts and Safety 5.4.2.9 Aircraft 5.4.2.11 Guiding
4.10.8 Interpretation and Information Services	1. Lack of interpretive facilities 2. Upgrading of existing facilities	1. Interpretation site and short walk developments 2. Community-supported information and education programmes	Integrated interpretive package for Waitaki	5.3.5 Visitor Centres 5.3.6 Interpretation
4.10.9 Aoraki/Mount Cook Tōpuni and Village	1. Substandard village and facilities. 2. Lack of shared management 3. Visitor Centre needs upgrading 4. Tōpuni status for Aoraki/Mount Cook	1. Tōpuni recognition 2. Integrated funding and facilities 3. Upgrade Aoraki/Mount Cook Visitor Centre 4. Review Aoraki/Mount Cook Village Development and Management plans	1. Revised plan guidance and controls for village development 2. New management structure for village 3. Upgrade facilities and services 4. Recognition of Ngāi Tahu values	5.1.2 Treaty Partnership 5.1.4 Communication and Liaison 5.3.5 Visitor Centres 5.4.2.7 Accommodation 6.1 Plans and Functional Strategies

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5.5 Departmental Management

5.5.1 Introduction and Overview

The Conservancy is one of the largest in the country; responsible for managing about 1360 individual administrative units and two national parks totalling over 770,000 hectares and one marine mammal sanctuary. Annual business plans are prepared to detail the proposed conservation programme each year.

There are a number of issues associated with the Conservancy management:

- the low protection status and public profile of some areas such as the Torlesse and Puketeraki ranges
- the high costs of disposing of land with low natural and historic values
- providing for a law enforcement system with strong community support
- a lack of comprehensive ecological information
- a lack of an extensive monitoring network
- the need to establish clear research priorities
- the management of the environmental impacts of statutory consents
- maintaining adequate strategic and management planning coverage with a high degree of public support

This CMS section outlines Conservancy objectives to deal with the following:

- seeking to gazette four new conservation parks (Foothills, Rangitata, Ōhau, Hawkdun/Ōteake)
- ensuring comprehensive ecological information is available for all of Canterbury
- establishing an extensive network of ecosystem monitoring to meet biodiversity goals
- using nature conservation criteria to assess acquisition priorities
- undertaking a rolling programme of disposals based on sound natural and land management criteria
- seeking voluntary compliance with legislation
- ensuring that in applications for using land managed by the Department, adequate consideration is given to the environmental impacts of proposals so that adverse impacts can be avoided, remedied, mitigated or the proposal relocated

5. Activity Objectives and Implementation

Each of the following five sections begins with a general introduction that outlines:

- the range and nature of activities included in that section
- the Department's management of these activities

Within each section, the individual categories contain:

- A brief definition of the activity.
- An explanation that illustrates the background, the current situation, the Conservancy's responsibilities and expected future trends.
- An overview of the Department's statutory responsibilities.
- A series of objectives, which are statements of intent that focus on what needs to occur in each activity to provide guidance for the Conservancy. They outline the natural, historic and recreation outcomes sought in that activity.
- A series of implementation statements that detail what the Conservancy will do to implement the CMS. To give effect to implementation statements, statutory approvals from the Minister of Conservation or Director-General may be required.
- Priorities for the Conservancy, which may be classified under primary, secondary or tertiary priorities, or priority actions or sites. By prioritising tasks, it becomes obvious that some activities will not be able to be undertaken or completed. The scope of the tasks facing this Conservancy are of such magnitude that it is unlikely sufficient resources or appropriate technology will be available in the next ten years to undertake or complete many of these tasks.
- Less achievable tasks, which refer to tasks the Conservancy may not be able to undertake or complete. Where possible, specific limitations to or on activities have been identified at the conclusion of the priority section and immediately preceding the key priority table. If no limitations are specified, this does not imply none exist, or will arise.
- A key priority table at the end of each activity section, which outlines the most important priorities for the Conservancy to address over the next ten years. The key priorities appear under Results Sought in the table. Other headings are:
 - Theme - the relevant topic heading
 - Issue - the basis of the problem
 - Method - how the Conservancy will achieve the result sought
 - Place - the CMS places where the activity will occur. In some, the activity may be in all places, in others, in only one.

Monitoring

The key priority tables flag the major actions required in the activity section. They will be used as indicators in monitoring CMS implementation (see 6.2 CMS Implementation).

5.1 People Partnership

5.1.1 Introduction and Overview

People partnership encompasses all the activities aimed at increasing people's knowledge and understanding of and support for both conservation and the Department.

The Department is required to interpret and administer the Conservation Act 1987 to give effect to the principles of the Treaty of Waitangi. It is essential that the Department recognises and understands Māori conservation concepts. Ngāi Tahu is the iwi holding mana whenua status in the Canterbury Conservancy and it wishes to have its tradition of resource tikanga incorporated into the Department's decision-making process. Ngāi Tahu also wishes to strengthen the relationship with te taiao – the natural world. This will give a Māori dimension to the Department's decision-making.

The overall goals for raising public awareness of conservation are to have:

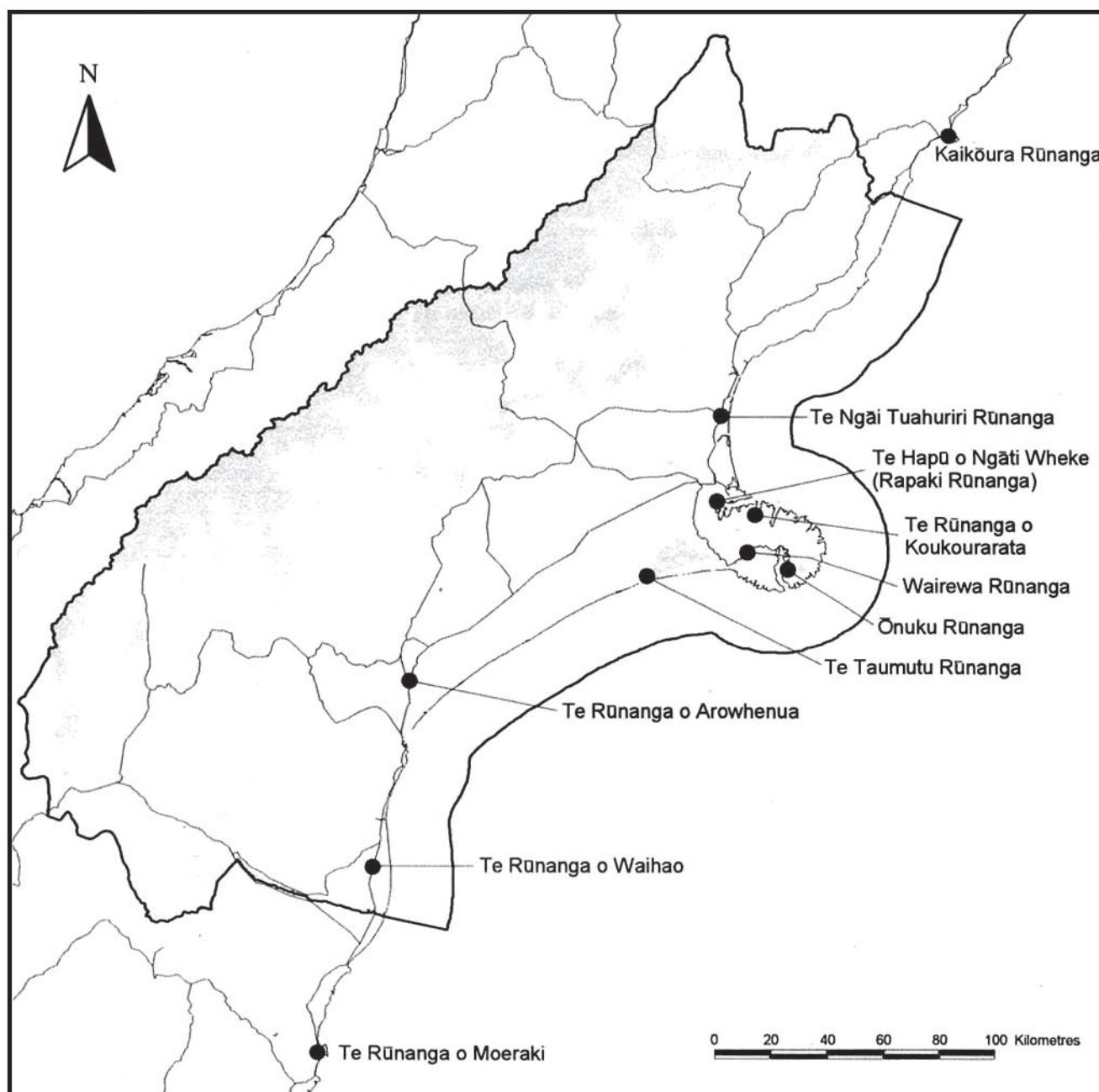
1. A high proportion of the public enjoying and appreciating the value of New Zealand's natural, historic, cultural and recreational resources and understanding the need for their protection.
2. Rūnanga, community groups, volunteers and other public agencies involved with the Department in achieving conservation objectives and projects, on and off land managed by the Department.
3. Individuals, rūnanga, community groups and other agencies initiating their own conservation objectives and projects on land not managed by the Department.
4. Systems and processes in place to ensure the Department's public awareness efforts are effective.

Some of the major issues are:

- how to develop a Ngāi Tahu perspective in management
- ensuring all Department staff have a good knowledge of natural, historic and recreation issues and are able to pass their knowledge on
- how to effectively involve associates and the public in Department decision-making
- the need to share conservation, increase volunteer opportunities and work more closely with key groups and agencies
- the provision of education resources
- the need to create awareness of particular ecosystems and their management issues
- the provision of quality interpretation

The Conservancy's Public Awareness (DOC 1995) and Interpretation (DOC 1991) Strategies detail future directions. Over the next ten years the Department will give its attention to a number of issues. A Ngāi Tahu perspective will be reflected in Department decisions. Sponsorship opportunities will be identified and developed. Groups such as pastoral lessees and other landowners will be a main focus, as will significant ecosystems. The Department will continue to work with educators and interpreters, including concessionaires, to further develop awareness. Important natural and historic sites with high visitor usage will have quality interpretation.

Map 14 Papatipu Rūnanga



- Marae location of Papatipu Rūnanga
- State highway
- Land managed by the Department
- Conservancy boundary

5.1.2 Treaty Partnership

Treaty partnership involves interpreting and administering the Conservation Act to give effect to the principles of the Treaty of Waitangi with Ngāi Tahu.

Ngāi Tahu

Ngāi Tahu is the iwi holding mana whenua over the Canterbury area. Ngāi Tahu has established a tribal structure for Ngāi Tahu Whānui (tribal members). This body (Te Rūnanga o Ngāi Tahu) is made up of 18 Papatipu (traditional) Rūnanga. Each rūnanga has a defined takiwā (area). Table 13 and Map 14 name and describe the rūnanga located in the Canterbury CMS area. They are the kaitiaki rūnanga for their takiwā.

The concept of kaitiakitanga is fundamental to Māori in relationship to the management of natural resources. It is defined in the Resource Management Act as ‘the exercise of guardianship by the tangata whenua of an area in accordance with tikanga Māori in relation to natural and physical resources, and includes the ethic of stewardship.’

Table 13: Papatipu Rūnanga and Their Takiwā

Papatipu Rūnanga	Takiwā	DOC Area
Kaikōura Rūnanga	The takiwā of Kaikōura Rūnanga centres on Takahanga and extends from Te Parinui o Whiti to the Hurunui River and inland to the Main Divide	North Canterbury
Te Ngāi Tuahuriri Rūnanga	The takiwā of Te Ngāi Tuahuriri Rūnanga centres on Tuahiwi and extends from the Hurunui to Hakatere, sharing an interest with Arowhenua Rūnanga northwards to Rakaia, and thence inland to the Main Divide.	North Canterbury Waimakariri Raukākūka
Te Hapū o Ngāti Wheke (Rapaki Rūnanga)	The takiwā of Te Hapū o Ngāti Wheke (Rapaki Rūnanga) centres on Rapaki and includes the catchment of Whakaraupo and Te Kaituna.	North Canterbury
Te Rūnanga o Koukourarata	The takiwā of Te Rūnanga o Koukourarata centres on Koukourarata and extends from Pohatupā to the shores of Te Waihora including Te Kaituna.	North Canterbury
Wairewa Rūnanga	The takiwā of Wairewa Rūnanga centres on Wairewa and the catchment of the lake Te Wairewa and the hills and coast to the adjoining takiwā of Koukourarata and Onuku Rūnanga.	North Canterbury
Te Rūnanga o Ōnuku	The takiwā of Te Rūnanga o Ōnuku centres on Ōnuku and the hills and coasts of Akaroa to the shores of Te Waihora.	North Canterbury
Te Taumutu Rūnanga	The takiwā of Te Taumutu Rūnanga centres on Taumutu and the waters of Te Waihora and adjoining lands and shares a common interest with Te Ngāi Tuahuriri Rūnanga and Te Rūnanga o Arowhenua in the area south of Hakatere.	North Canterbury Raukākūka
Te Rūnanga o Arowhenua	The takiwā of Te Rūnanga o Arowhenua centres on Arowhenua and extends from Rakaia to Waitaki, sharing interests with Te Rūnanga o Ngāi Tuahuriri ki Kaiapoi between Hakatere and Rakaia, and thence inland to Aoraki and the Main Divide.	Raukākūka Aoraki/Mount Cook Twizel
Te Rūnanga o Waihao	The takiwā of Te Rūnanga o Waihao centres on Wainono, sharing interests with Te Rūnanga o Arowhenua to Waitaki, and extends inland to Ōmarara and the Main Divide.	Raukākūka Twizel
Te Rūnanga o Moeraki	The takiwā of Te Rūnanga o Moeraki centres on Moeraki and extends from Waitaki to Waihemo and inland to the Main Divide.	Twizel

Source: Te Rūnanga o Ngāi Tahu Act 1996

Treaty Principles

Section 4 of the Conservation Act requires the Department and persons acting under the Conservation Act to give effect to the Treaty of Waitangi. The Treaty is also a founding document of New Zealand.

The Court of Appeal has determined that the Department's obligation to give effect to the principles of the Treaty extends to the Acts in the First Schedule of the Conservation Act except where it is inconsistent with the specific Act. The principles include notions of reasonableness, awareness of other Treaty partners' views, willingness to accommodate those views, fairness and good faith. The principles are still evolving through the pronouncements of the courts and the Waitangi Tribunal in particular cases. The case law (included as Appendix 1) has thrown light on aspects of the following principles:

The Essential Bargain

Principle 1: To recognise the Crown's authority to make laws for the good order and security of the country and for conservation-related purposes.

Principle 2: To recognise the right of Māori to exercise iwi authority and control over their own land, resources and taonga.

Principle 3: To recognise the right of Māori and non-Māori alike to equality of treatment and privileges of citizenship.

Partnership

Principle 4: To act reasonably and in good faith.

Duty to be informed

Principle 5: To make informed decisions.

Active Protection

Principle 6: Where appropriate and to the fullest extent practicable, to take active steps to protect Māori interests.

Avoid Prejudicial Action

Principle 7: To avoid action which would create new Treaty grievances.

Principle 8: To avoid actions which would prevent the redress of claims.

Resolution of Treaty Claims

The Ngāi Tahu Claims Settlement Act 1998 is the significant outcome in the settlement of the Ngāi Tahu Claim, Wai 27 (see Waitangi Tribunal, 1991). Conservancy staff will work with Te Rūnanga o Ngāi Tahu and other Crown agencies to implement the Settlement Act.

The Act contains statutory instruments such as Tōpuni, deeds of recognition, statutory advisor, statutory acknowledgement, protocols, nohonga and Fenton entitlements.

Relationship

The Courts have indicated that the Treaty has created between the Crown and Māori a relationship, akin to a partnership. Each party is obliged to act towards the other in good faith, fairly and honourably. The Crown must make informed decisions to protect Māori lands and resources and to avoid actions that create further grievances and prevent redress. The Treaty partners must act co-operatively.

In the past, Ngāi Tahu involvement in the management of land managed by the Conservancy has been limited. Similarly, the interpretation/recognition of their culture and traditions has also been limited. Current programmes that involve Ngāi Tahu Rūnanga include:

- representation on Conservation Boards
- involvement with Te Ngāi Tuahuriri Rūnanga in the restoration of Ōtūkaikino (Wilsons Swamp)
- consultation on concessions applications
- consultation on significant consent applications under the Resource Management Act.
- consultation and involvement over management programmes for Kaitorete Spit with Te Taumutu and Wairewa Rūnanga

Important areas where there will be more involvement with Ngāi Tahu in the future include:

- implementing the Crown's settlement of the Ngāi Tahu claim
- comprehensively recording sites, their values and tikanga, where jointly agreed
- ensuring that Ngāi Tahu tikanga is incorporated into management and advocacy

In all these undertakings the Conservancy will be aware of the application of Article One of the Treaty, which confers on the Crown the exclusive right to make laws for the good governance of the country.

The Department is seeking a co-operative relationship with Ngāi Tahu, recognising both *kawanatanga* (the authority vested in the Crown; in the modern context, the process of Government) and *tino rangatiratanga* (the authority vested in tribes). Such a relationship requires agreement by both parties to the conditions to be applied.

The Department is seeking a relationship with Ngāi Tahu in which:

- both parties act independently
- both parties are committed to a co-operative relationship
- the relationship is based on a shared understanding
- the relationship is based on a common goal
- both parties engage in purposeful activity
- the relative roles and responsibilities of both parties are clear and agreed
- the respective capabilities of the two parties are recognised
- the actions of both parties are co-ordinated

All of these factors indicate a common agenda that requires time and space for the relationship to develop and grow.

Consultation with Ngāi Tahu on major issues of common concern is fundamental to the maintenance of a good relationship. The Conservancy is striving to develop positive working relationships by maintaining consultative networks for the purposes of information sharing and to facilitate the active participation of Ngāi Tahu in conservation management at both a Conservancy and national level.

Statutory Framework

Conservation Act

Section 4 of the Conservation Act 1987 states that 'this Act shall be so interpreted and administered as to give effect to the principles of the Treaty of Waitangi' and places a responsibility and obligation on the Department and Conservation Boards to act in accordance with those principles. The Treaty principles also apply to the administration of other legislation in the First Schedule. The Ngāi Tahu Claims Settlement Act 1998 places additional obligations on the Department.

In Canterbury, the Crown's Treaty partner with respect to the Conservancy is Ngāi Tahu. The Te Rūnanga o Ngāi Tahu Act 1996 established a body known as Te Rūnanga o Ngāi Tahu for the benefit of the members of Ngāi Tahu Whanui. It defines the *takiwā* (area) of the Ngāi Tahu Whanui (the collective individuals) and its constituent Papatipu Rūnanga. Importantly, the Act notes that where any enactment requires consultation with any *iwi* authority, it is to be held with Te Rūnanga o Ngāi Tahu.

The Department must always consider the application of the principles of the Treaty and decide how they are to be weighed in making a particular decision. The decision must also always promote the conservation of New Zealand's natural and historic resources, which is the primary purpose of the Act.

Settlement Mechanisms

Mechanisms established in the Deed of Settlement (1997) and Ngāi Tahu Claims Settlement Act 1998 place a number of specific obligations on the Conservancy, in addition to the general duty imposed by section 4 of the Conservation Act.

Tōpuni

The concept of Tōpuni derives from the traditional Ngāi Tahu tikanga (custom) of persons of rangatira (chiefly) status extending their mana and protection over a person or area by placing their cloak over them or it. In its new application, a Tōpuni confirms and places an 'overlay' of Ngāi Tahu values on specific pieces of land managed by the Department. A Tōpuni does not override the existing status of the land (for example, National Park status), but ensures that Ngāi Tahu values are also recognised, acknowledged and provided for. Three Tōpuni have been declared in the Canterbury Conservancy:

- Ripapa Island
- Kura Tāwhiti (Castle Hill)
- Aoraki/Mount Cook

Each Tōpuni involves three levels of information:

- A statement of the Ngāi Tahu values in relation to the area
- A set of principles aimed at ensuring that the Department avoids harming or diminishing those values
- Specific actions which the Director-General of Conservation has agreed to undertake to give effect to those principles.

The Canterbury/Aoraki Conservation Board and the New Zealand Conservation Authority are required to have particular regard to the Ngāi Tahu values and specific principles in relation to each Tōpuni, and to consult with and have particular regard to the views of Te Rūnanga o Ngāi Tahu in the preparation of conservation management plans and national park management plans in relation to these areas. The specific actions may change over time as circumstances change.

Protocols

Pursuant to s. 282 of the Ngāi Tahu Claims Settlement Act, the Minister of Conservation has issued Protocols in relation to the Department's relationship with Ngāi Tahu. In this context, s. 281 of the Act provides: *"...the term 'protocol' means a statement in writing, issued by the Crown through the Minister of Conservation to Te Rūnanga o Ngāi Tahu, which sets out:"*

- (a) How the Department of Conservation will exercise its functions, powers, and duties in relation to specified matters within the Ngāi Tahu claim area; and
- (b) How the Department of Conservation will, on a continuing basis, interact with Te Rūnanga o Ngāi Tahu and provide for Te Rūnanga o Ngāi Tahu's input into its decision making process.

The 'specified matters' dealt with in the Protocols are:

- Cultural materials
- Freshwater fisheries
- The culling of species of interest to Ngāi Tahu
- Historic resources
- Resource Management Act involvement
- Visitor and public information

The Protocols, which are enforceable against the Minister of Conservation by way of public law action (s.285), make general statements about how the Department should conduct its business in these areas. The Protocols also establish a process whereby Te Rūnanga o Ngāi Tahu can have input into the Department's business planning processes, and identify specific projects to be pursued, subject to available funding.

The Conservancy is also required to implement a number of other provisions of the settlement, including deeds of recognition, nohoanga and taonga species acknowledgement, as well as supporting Te Rūnanga o Ngāi Tahu's management of areas formerly under its control.

Objectives

- To assist with the implementation of the Ngāi Tahu Claims Settlement Act 1998 and Deed of Settlement 1997.
- To ensure that future relationships do not breach the Settlement Act and *Deed of Settlement* and statutory instruments or create new grievances.
- To recognise the mana whenua of Ngāi Tahu and consult with Te Rūnanga o Ngāi Tahu and its Papatipu Rūnanga to maintain positive relationships, as provided in the Settlement Act or as otherwise agreed with Te Rūnanga o Ngāi Tahu.
- To be responsive to Ngāi Tahu interests in all relevant aspects of the Department's work.

Implementation

The Conservancy will, within the framework of the Ngāi Tahu Claims Settlement Act:

1. Assist with the implementation of the Crown's settlement of the Ngāi Tahu claim.
2. Give effect to statutory instruments contained within the Settlement Act relating to the Conservancy.
3. Implement the protocols (see 2.3.5 National Protocols) issued by the Minister.
4. Develop mutually agreed mechanisms and/or guidelines for undertaking liaison and consultation between the Conservancy and Ngāi Tahu.
5. Consult with Te Rūnanga o Ngāi Tahu and the respective Papatipu Rūnanga in the Conservancy as outlined in Table 13 and as agreed with Te Rūnanga o Ngāi Tahu.
6. Ensure that staff liaise with Te Rūnanga o Ngāi Tahu and Papatipu Rūnanga in regular meetings over relevant matters of mutual concern.
7. Ensure that Te Rūnanga o Ngāi Tahu and relevant Papatipu Rūnanga are consulted, and seek to reach agreement, when considering any proposals to significantly affect or use any land managed by the Conservancy.
8. Develop and implement a process for including Ngāi Tahu perspectives in the management of the national parks, reserves, conservation areas and species managed by the Conservancy.
9. Identify and develop appropriate opportunities for Ngāi Tahu and the Department to work together on collaborative management projects.
10. Involve Te Rūnanga o Ngāi Tahu and Papatipu Rūnanga in the protection and interpretation of natural and historic resources of significance.
11. Support Ngāi Tahu in interpreting their traditional relationships and cultural values to visitors.
12. Assist each Papatipu Rūnanga (if they agree) to develop a database on their cultural values and traditions of relevance to this Conservation Management Strategy. Guidelines for consultation and use of the databases will be established at a Conservancy level.
13. Include appropriate Ngāi Tahu tikanga in the management of land and species, through agreed consultation mechanisms including, but not limited to, guidelines.
14. Monitor the Department's progress annually through the Kaupapa Atawhai Strategy (DOC 1997; see 2.3.3 Atawhai Ruamano) that sets out objectives and monitors progress in the development of the partnership across all the Department's expected outcomes.
15. Refer the interests of other Māori groups (Iwi Māori Katoa) to the appropriate Papatipu Rūnanga in the first instance.
16. Consult with Te Rūnanga o Ngāi Tahu and each Papatipu Rūnanga as part of the process of business planning to discuss projects within the takiwa of each rūnanga.
17. Actively seek the views of Ngāi Tahu on Resource Management Act issues, conservation management strategy and plan reviews and amendments, and other appropriate planning matters.
18. Undertake, with Ngāi Tahu involvement, training hui for Māori perspectives and wananga tikanga Māori (classes in Māori protocol and language) to assist in developing staff understanding and confidence in consultation with Ngāi Tahu.
19. Inform Ngāi Tahu about, and seek their participation in, Conservancy activities. This is to provide for the relationship of Papatipu Rūnanga with their culture and traditions.
20. Pursue increased awareness of Treaty principles and responsibilities, Ngāi Tahu perspectives, the

Settlement Protocols and other protocols.

See also: 5.1.4 Communication and Liaison

5.4.5 Traditional Māori Uses.

Priorities

Primary

The implementation of the Ngāi Tahu Claims Settlement Act will have the highest priority for the Conservancy. This is a commitment that the Crown has negotiated with Ngāi Tahu. Regular consultation with Ngāi Tahu will remain a high priority.

Secondary

Jointly developing guidelines for the preparation of a database on Ngāi Tahu sites and values on lands managed by the Conservancy will be an important secondary priority. This will allow the Conservancy to incorporate local tikanga into the management of natural and historic resources, and visitor impacts. This is subject to rūnanga agreement and approval, and consistency with the Settlement Act.

Place Priorities

While the above priorities apply across all the Conservancy, key priorities of significance to Ngāi Tahu have been identified in a number of places. These include:

- Aoraki/Mount Cook
- Weka Pass
- Waimakariri Basin and Pareora rock art sites
- Te Waihora
- Kaitorete Spit
- Wainono Lagoon
- Ripapa Island protection and restoration
- Kura Tāwhiti Conservation Area

Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include consultation on all Resource Management Act consents assessed by the Conservancy.

Table 14: Key Treaty Partnership Priorities

Theme	Issue	Method	Results Sought	Place
Treaty settlement	To resolve Ngāi Tahu Treaty grievances	Assist with the implementation of the Ngāi Tahu Claims Settlement Act	1. Mana restored 2. Ngāi Tahu tikanga incorporated 3. Appropriate access to mahinga kai provided	All
DOC/Ngāi Tahu partnership	To implement DOC/ Ngāi Tahu protocols	Follow procedures established by the protocols	Agreements on joint actions and communication met	All
Database	To increase DOC's knowledge of sites important to Ngāi Tahu	Assist rūnanga in the preparation and maintenance of cultural site database	Sites of cultural importance and their value to Ngāi Tahu recorded.	All
Ngāi Tahu consultation	To ensure both Ngāi Tahu and the Conservancy meet regularly to discuss matters of mutual concern	1. Protocols 2. Hui, regular consultation	Regular consultation at both Te Rūnanga o Ngāi Tahu and Papatipu Rūnanga levels	All
Ngāi Tahu tikanga	The management of lands in the Conservancy in accordance with local tikanga	Hui, regular consultation, information recording and staff training	Ngāi Tahu tikanga incorporated into conservation management and advocacy	All

5.1.3 Community Participation

Providing support and opportunities for people to become involved in 'hands-on' natural and historic resource protection.

Current Situation

Background

The Conservancy encourages people to take part in natural and historic enhancement or protection projects and provides participation opportunities to meet an increasing demand. Projects increase participants' understanding of conservation aims and issues, strengthen community links, help the Department to achieve CMS goals and enhance the environment. Community involvement provides an ideal opportunity for sponsorship from the business and other private sectors.

Community involvement projects have developed on an *ad hoc* basis without regard to the threat to natural values in Canterbury. Given the scope of the opportunities for the protection of Canterbury's indigenous biodiversity and historic resources it is necessary to concentrate on projects where the threats to natural and historic values are highest. Public demand for opportunities to be involved in projects is steadily increasing.

Current Conservancy projects include:

- Tū Kakariki – the New Zealand Tree Programme
- support for two Canterbury-based New Zealand Conservation Corps projects (administered by the Ministry of Youth Affairs)
- work experience for secondary and tertiary students
- Rūnanga projects
- projects for schools, youth organisations, periodic detention and prison groups

National and local sponsorships are already in place for three ongoing Tū Kakariki programmes, where businesses support native-tree plantings by schools and community groups on public lands. One major long-term local project is Mau Mahara, the Living Memorial Programme in which the Department, in partnership with a local funeral director and Te Ngāi Tuahuriri Rūnanga, is restoring a wetland.

Future

Areas where potential for expansion of community participation activities exists include:

- increasing and fostering opportunities for community participation on land managed by the Department, and in other areas of the Department's responsibility
- increasing and fostering opportunities for schools and community groups
- increasing sponsorship opportunities from private enterprise

Statutory Framework

Section 6(c) of the Conservation Act enables the Department to promote the benefits of the conservation of New Zealand's natural and historic resources to present and future generations.

Objective

- To foster the participation of individuals and community groups in appropriate natural, historic and recreation projects.

Implementation

The Conservancy will:

1. Continue to develop programmes and opportunities for community involvement in urban and rural areas by working with local communities and other agencies, landholders, local communities and outdoor recreation groups.

The criteria for determining community participation projects are:

- availability of appropriate supervisors, within and outside the Department
- availability of resources to support the project such as time, materials, accommodation and transport
- the project's ability to increase natural and historic awareness and recreational opportunities, and to achieve significant gains in protecting Canterbury's natural and historic diversity
- safety; ensuring all projects can be managed safely for the participants, staff and leaders

2. Encourage, support and train volunteer leaders where needed and involve a wider range of staff in volunteer activities.
3. Emphasise positive and rewarding experiences for volunteers, with proper recognition of their contributions. This may include certificates and log books, media coverage and volunteer newsletters.
4. Ensure all community participation events include an element of conservation education, particularly indigenous biodiversity.
5. Identify new opportunities for volunteers as part of annual project planning. These will focus on specific ecosystems such as tussock grasslands, dry plains savannah, braided rivers, estuaries, wetlands and marine areas and on involving groups such as landcare groups. The Conservancy will develop guidelines to facilitate community initiatives and sponsorships that would rank highly on indigenous biodiversity criteria at a district and regional level.
6. Support, train and warrant volunteer groups and individuals who assist with protection, management and compliance; such as honorary rangers, Marine Watch and High Country Fire Teams.
7. Maintain a programme for Christchurch volunteer participation in co-operation with Landcare Research, Christchurch City Council, Travis Wetland Trust, Royal Forest and Bird Protection Society, Summit Road Society and other interested associates. A similar programme for Timaru will be investigated.
8. Support community and individual initiatives, where appropriate, with advice and assistance.
9. Support Papatipu Rūnanga-based projects that rank highly on indigenous biodiversity or historic criteria.
10. Continue to support and recognise present sponsors.
11. Work with amateur clubs and organisations promoting recreation, safety and education on land managed by the Department.
12. Liaise with the Arthur's Pass and Aoraki/Mount Cook communities to encourage their support for and participation in conservation projects.

Priorities

Primary

The ongoing priority for community participation is to provide safe and rewarding projects for the public on lands managed by the Conservancy. Support for volunteers and others working in the areas of fire control, protection and compliance assistance are also high priorities.

Secondary

The secondary priority is to foster community participation in conservation projects on other lands.

Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include running conservation volunteer holidays from each Area office.

Table 15: Key Community Participation Priorities

Theme	Issue	Method	Results Sought	Place
Ōtukaikino revegetation	Mau Mahara sponsorship by Lamb and Hayward. Major restoration project of wetland close to Christchurch	Volunteers to support DOC staff, work schemes and Ngāi Tahu Rūnanga involvement	1. Exotic plants are removed 2. A sustainable indigenous wetland community is re-established with associated recreation and interpretation	Plains (Ōtukaikino – Wilsons Swamp) 4.6
Quail Island restoration (See also 5.2.3 Land Ecosystems)	Quail Island has significant potential for island habitat and historic site restoration using Christchurch community support	1. Investigate feasibility of habitat restoration 2. Plan for restoration 3. Establish community trust and implement programme	If feasible, a plan for habitat restoration and historic site restoration is implemented, in conjunction with a community trust	Banks Peninsula 4.4
Kirkliston, Mackenzie, Craigieburn, Hanmer wilding tree control (see also 5.2.9 Weeds and Exotic Plants)	Wilding tree control requires extensive community and landowner support	Work with local groups, communities, agencies and land owners on long-term wilding tree control projects	Wilding trees removed from sites of high natural value, and elsewhere contained	Hurunui 4.2 Waimakariri 4.7 Waitaki 4.10
High Country Fire Team (see also 5.2.10 Fire Management)	Control of fire on DOC and adjacent land requires the support of trained volunteers	Provide logistical support and training to the High Country Fire Team	Trained and motivated High Country Fire Team available for call out	All places
Honorary rangers (see also 5.5.3 Compliance and Enforcement)	Encouraging compliance with statutory controls requires public support. A key element in this is the honorary ranger system	Licence, train and warrant officers to undertake compliance work	Honorary rangers are available to assist DOC staff with priority compliance functions	All places
Marine Watch	Marine mammal protection and strandings require the support of trained volunteers	Assist and support Marine Watch	Trained and motivated Marine Watch volunteers available	Banks Peninsula 4.4 Plains 4.6

5.1.4 Communication and Liaison

Communicating and liaising is necessary with agencies, groups and individuals the Department works with, and the public.

Current Situation

The protection of natural and historic resources cannot be achieved by one organisation alone. Many groups have a role and the Department needs to work in close co-operation with groups and individuals and the wider public.

The Conservancy has prepared a Public Awareness Strategy (DOC 1995) that sets immediate priorities for communication and liaison based on the National Public Awareness Strategy 'Conservation Connections' (DOC 1994).

Associates

Associates with whom the Department works most effectively include Royal Forest and Bird Protection Society of New Zealand Incorporated, Federated Mountain Clubs of New Zealand Incorporated, Conservation Boards, regional and district councils, Ngāi Tahu, landowners/runholders and interest groups. These are generally known as the Department's 'key' associates and protocols have been established with some of them (see 2.3.5 National Protocols). Partnership with Ngāi Tahu needs further development (see 5.1.2 Treaty Partnership). Campaigns such as Conservation Week, Arbor Day and Sea Week are run in conjunction with other agencies and groups.

Media

Media opportunities are used to promote specific topics, issues and policy, and to encourage individuals, groups and the public to play their part in achieving natural and historic goals and to raise awareness of the Department's role.

Participation

Many of the Department's decisions benefit from input from outside organisations and individuals. This may range from statutory planning documents to liaison on issues that affect local communities.

Awareness

Personal experiences of natural areas stimulate awareness; however, resource constraints and the size of the task mean that the Department must work in with other groups, teachers, leaders, educational institutions and concessionaires to seek the most effective ways of raising conservation awareness. Information provided needs to be focused on significant ecosystems such as tussock grasslands and wetlands.

The Conservancy contains almost 400 schools, one College of Education, two universities, two polytechnics and numerous environmental groups and concessionaires, and liaises regularly with these educators.

As part of their day-to-day work, Department staff need to be well informed about a broad range of issues so that they can contribute to raising public awareness.

Publications

A major component of the Conservancy publication programme is the preparation of recreation brochures (see 5.3.6 Interpretation) and reports on conservation issues, plans and research. Another facet is the production of information sheets in support of environmental education topics.

Statutory Framework

Section 6(b) of the Conservation Act enables the Department to advocate for conservation, 6(c) to promote the benefits of conservation to present and future generations, and 6(d) to prepare, provide, disseminate, promote and publicise education and promotional material relating to conservation.

In addition, many Department functions involve or require liaison or consultation outside the Department. Where consultation is required, recent case law has defined the elements of successful consultation (see glossary).

Objectives

- To enhance relationships with key associates to promote natural and historic values, foster recreation, advise of priorities and programmes, achieve effective consultation, exchange information and viewpoints, and enhance common goals.
- To increase public understanding of, support for and involvement in the protection of natural and historic resources and the Department's mission.

Implementation

The Conservancy will:

1. Implement and update the Canterbury Conservancy Public Awareness Strategy (1995) in accordance with the CMS and the Department's National Public Awareness Strategy (1994).
2. Set priorities consistent with the above strategy that will:
 - focus on major issues such as indigenous biodiversity, visitor servicing and historic sites
 - allow a clear exchange of information on issues between the Conservancy and associates
 - maximise the public audience for information on natural and historic resources and the work of the Department
3. Maintain and enhance liaison with key Canterbury interest groups through regular meetings.
4. Foster public and associate involvement in departmental decision-making through statutory processes (e.g. planning and concessions) and generally through consultation with affected and interested parties.
5. Improve liaison with landholders and local communities through greater information sharing, personal approaches, consultation and regular meetings.
6. Work more closely with pastoral lessees to develop ecologically, economically and socially sustainable land use.
7. Maintain and enhance relationships with the Conservation Boards to ensure that they can fulfil their roles of monitoring and advising on policy and implementation.
8. Maintain and enhance relationships with the North Canterbury and Central South Island Fish and Game Councils, in particular to focus on maintaining and enhancing freshwater ecosystems in Canterbury.
9. Inform associate groups by regular contributions to their newsletters.
10. Produce a regular Conservancy newsletter.
11. Encourage staff to attend relevant seminars and meetings run by associates.
12. Consult with conservation groups, Fish and Game Councils, conservation boards and Ngāi Tahu on Resource Management Act advocacy issues, where practicable.
13. Encourage regional and district councils to include methods and conditions in plans, plan changes and consents (with significant effects on natural and historic values) to:
 - safeguard the life-supporting capacities of air, water, soil and ecosystems
 - identify and protect significant areas of indigenous vegetation and wildlife habitat
 - identify and protect habitats of indigenous and sports fish
 - preserve the natural character of wetlands, lakes and rivers, and their margins
 - identify and protect outstanding natural features and landscapes
 - maintain and enhance public access to and along the coastal marine area, lakes and rivers
 - identify and protect the relationship of Ngāi Tahu and their culture and traditions with their ancestral lands, water, sites, wāhi tapu and other taonga
14. Provide and share natural, historic and recreational information with regional, city and district councils.
15. Ensure campaigns are jointly co-ordinated, planned, promoted and evaluated.
16. Share planning of campaign events with community groups and local authorities, to ensure that there is a range of opportunities for community participation.
17. Use campaigns and events such as Conservation Week, Sea Week, Arbor Day and Motukarara Nursery Open Day as a focus for increasing public understanding of indigenous biodiversity.
18. Focus media releases and features on major issues, areas, campaigns and opportunities for public participation.
19. Ensure that media releases and features are responsive to Ngāi Tahu knowledge and tikanga (custom).
20. Maintain frequent contact with journalists through a regular supply of information on local issues, story ideas, campaigns and Department initiatives.
21. Co-operate with other environmental groups to ensure that the media have a balanced view of environmental issues, and that the environmental movement as a whole gains more media skills.
22. Respond quickly and efficiently to news media information requests.
23. Ensure staff are aware of media opportunities, and provide appropriate training.

24. Continue to monitor media, and respond to issue coverage where appropriate.
25. Support opportunities to raise awareness of natural and historic values in natural areas, especially for young people, using the concept of indigenous biodiversity and working with the education sector.
26. Liaise with and support educators to increase the conservation component in 'Education Outside the Classroom' programmes, and through the Canterbury Environmental Education Support Group.
27. Develop targeted resource material in association with education and conservation groups.
28. Focus on major issues and ecosystems for resource material, e.g. indigenous biodiversity, visitor impacts, impacts of weeds and pests, tussock grasslands, marine conservation, wetlands and dry plains.
29. Where possible, provide resources free, especially to libraries, resource centres, schools and conservation groups. A minimal copying charge will be applied where needed.
30. Support the Christchurch Environment Centre, Arthur's Pass Outdoor Education Centre and the Environment Education Centre of New Zealand based at Craigieburn Forest Park.
31. Encourage sponsorship to fund management and advocacy programmes where:
 - projects can be funded that would not normally be funded from Crown outputs
 - projects enhance the strategic direction of the Conservancy and the Department
 - there is no conflict between the activities of the sponsor and the activities of the Department
 - the sponsorship proposal is detailed and includes a public awareness plan
 - promotion and publicity are proportional to the value of the sponsorship

Nationally significant sponsorship proposals must be approved by the Department's Head Office. Any publicity relating to sponsored projects must be approved by the Department.
32. Produce quality technical reports, plans and other policy documents for effective public information and participation.
33. Produce and update a series of recreational brochures and leaflets that concentrate on high-use visitor areas and provide coverage of key sites.
34. Provide other products and information where the Department is the primary source of such information.
35. Recover costs from products and publications except where there is a need for easy access to information or public participation justifies discount pricing or the distribution of free copies.
36. Take action on the protocols with Local Government New Zealand, Ministry of Fisheries, Fish and Game Council, and Te Rūnanga o Ngāi Tahu.

Priorities

The five major priorities for communication and liaison are to:

- maintain close working relationships with Conservation Boards, key associates and community groups
- consult with affected parties and interest groups when reaching decisions
- effectively use plans and other opportunities to encourage regional and district council commitment to protect natural and historic resources
- maintain a positive profile within the media of the Conservancy's activities
- target the education sector for the transmission of ideas with a focus on major issues and outdoor opportunities

Priority Actions

Areas in which important communication and liaison initiatives have begun, and which will continue to require a significant portion of available resources in the immediate future, are outlined in Table 16.

While the above priorities apply across the Conservancy, additional priority areas for public involvement have been recognised in other activity and place sections. These include marine reserve and marine mammal sanctuary consultation, tenure reviews, land status investigations, water conservation orders, management plans, regular NGO meetings in Timaru and Christchurch and support for the Christchurch Environment Centre.

Less Achievable Tasks

Tasks that may not be undertaken or completed include:

- producing resource material and kits for the full range of conservation subjects
- visiting schools other than those few in communities close to land managed by the Department
- producing new books on Canterbury natural, historic and recreational topics
- producing regular feature articles for media
- advertising in media
- producing videos
- statutory advocacy on all resource consents that have adverse effects on natural and historic resources and recreational values
- meeting regularly with all key associates and community organisations

See also

- 5.1.2 Treaty Partnership
- 5.3.5 Visitor Centres
- 5.3.6 Interpretation

Table 16: Key Communication and Liaison Priorities

Theme	Issue	Method	Results Sought	Place
Landowner/lessee liaison	Protection of indigenous biodiversity is dependent upon land managers' support and understanding of its significance	1. Regular meetings with Federated Farmers, Landcare groups, and other groups 2. Participation in field days 3. Conservation awards 4. Newsletters 5. Media articles 6. Resource kits 7. RM planning and negotiation 8. Tenure review	Commitment by more land managers to the protection of indigenous biodiversity on their properties	All places
Liaison with Ngāi Tahu, Conservation Boards, key associates, community and interest groups and affected parties	Mutual support on agreed objectives is important	1. Regular meetings, e.g. Christchurch, Timaru 2. Participation in departmental planning and policy processes 3. Liaison on submission (e.g. RM planning) 4. Sharing of information 5. Joint campaigns 6. Liaison with Fish and Game Councils. 7. Conservation Board involvement	1. Strengthened advocacy for conservation in external forums 2. Greater support for departmental priorities and policies	All places – Christchurch and Timaru in particular
Regional and district council liaison	To encourage council and ratepayer support through planning, council operations and public relations programmes	1. RMA advocacy 2. Input into annual plans and management plans 3. Regular meetings with councillors and staff 4. Information exchange 5. Joint programmes	Greater council and ratepayer commitment to conservation and sustainable management of resources	All places
Education Material	Lack of resource material for schools on key issues	1. Develop resource sheets and kits in conjunction with Head Office, other organisations and educators	Increase knowledge and understanding of natural and historic issues by students	All places
Campaign/Event focus	Need to focus DOC special events, e.g. Sea Week, Arbor Day, Conservation Week, and Motukarara Nursery Open Day	1. Provide an annual focus for events on issues such as indigenous biodiversity, visitor services and historic sites	1. Reinforce messages on key themes 2. Co-ordinate advocacy with other DOC work	All places

5.2 Heritage Conservation

5.2.1 Introduction and Overview

The protection and enhancement of Canterbury's natural and historic resources requires a recognition of their values and the active involvement of landholders. Management activities on the land have a broad range of influences and effects. These are categorised under the following headings:

- Landscape
- Land Ecosystems
- Freshwater Ecosystems
- Marine Ecosystems
- Indigenous Species
- Historic Resources
- Animal Pests and Wild Animals
- Plant Pests and Exotic Plants
- Fire

Factors linking these groups include:

- The need for continuity and connectedness across habitats and through ecosystems. This broader context is best accommodated at the level of landscapes, a level that defines bold patterns of use and change. At such a level it becomes possible to comprehend the influences and effects of a particular management action on the landscape as a whole.
- The need to establish priorities for management action in relation to particular places within the landscape. Where is action best directed to maximise the maintenance of indigenous and historic diversity overall?
- The relationship between natural values and human uses.

Establishing priorities is not an easy task. The Department of Conservation is currently developing systems to better prioritise both ecosystem and historic protection work and their relative priorities. A difficulty is the major gaps in knowledge about the natural resources of Canterbury, which can be addressed by:

- further historic and ecological surveys
- a shift in the emphasis from what there is much of and/or a lot known about, such as beech forests and European historic sites, to what there is little of and little known about, for example, invertebrates, reptiles and Māori sites
- the targeting of weed and pest control to viable habitat areas, to protect and sustain indigenous biodiversity rather than simply maximising the removal of weeds and pests as an end in itself

Threats

Animal and plant pests, and fire are the three biggest threats to land ecosystems, indigenous species and landscape values. Animal pests pose direct threats to plants through grazing and trampling, and to indigenous animals through predation or damage to food supplies. Plant pests smother native ecosystems and can also destroy the food supply and breeding habitat of important indigenous species. Fire is a threat to all plants and animals in terrestrial and some freshwater ecosystems, as well as to historic sites and recreational facilities.

As these are major components of the Department's management they will each be treated separately. However, it must be noted that future development of integrated pest management programmes will see these barriers largely disappear, especially where control is to meet specific indigenous biodiversity priorities.

Survey and Monitoring

Survey and monitoring activities are carried out to meet the Department's management and advocacy requirements. They are covered in 5.5.4 (Survey and Monitoring).

5.2.2 Landscape

- identifying, protecting and rehabilitating landscapes and landscape values

Current Situation

Landscapes can be interpreted as expressions of the evolving relationships between land and people, and as expressions of the values, beliefs and visions of the cultures who inhabit them.

The Department's role in landscape management focuses on the natural and historical aspects of landscape. The main features and characteristics of Canterbury's landscapes are outlined in 2.4 (Canterbury Context).

Background

The landscapes of Canterbury's high country, foothills and Banks Peninsula are distinctive and often fragile. The effects of changing tenure and land use (such as pastoral lease tenure review and forestry) and related social processes can have significant impacts on landscape values.

The Canterbury plains, home to the bulk of the region's population, are highly modified. Further modification may occur to braided rivers through water extraction and protection works. There are few indigenous plant habitats, and these are seldom protected. Restoration and rehabilitation programmes can enhance the landscape values of the plains.

The fragile and dynamic coastal environment is vulnerable to changes in coastal processes.

Natural and historic values are beginning to be represented in policy documents and considered in development plans. Landscape values have often been inadequately considered in urban development. Individuals often modify parts of a landscape without considering the effects on the wider landscape. Many such changes, over time, can disrupt existing processes and fragment values. Ecologists increasingly talk of ecology at a 'landscape' level to recognise that individual species and communities are an integral part of larger ecosystems existing at a landscape scale.

Landscape management aims to maintain or enhance an area's landscape character. Where change is proposed, landscape management seeks to ensure the proposed change is integrated with appropriate regard to the effects the change will have on the landscape's broader character.

The objectives of landscape management should ensure the effects of change are accounted for beyond the immediate site and across time. The effects of change on the landscape are directly related to the effects of change on resources generally. They also exist within a broader set of values and concerns. Such values and concerns seek to ensure that the resources we sustain not only satisfy our physical needs, but also sustain the quality of our relationships within the landscape.

The Department of Conservation has as a function the protection, of landscape values. In carrying out this function the Department would seek to protect and enhance landscapes it considers of significant value. It would also seek to protect and enhance those natural and historic values that still remain as important components within 'cultural' or larger landscapes. On land not managed by the Department, landscape protection can be promoted through providing information and working with communities, as well as through statutory Resource Management Act instruments (for example, district plans).

Outstanding Landscapes

A number of Canterbury's landscapes are recognised for their distinctive character and processes; their significance and value to Māori, other New Zealanders, and international visitors; and their contribution to the overall landscape character of Canterbury.

The Canterbury Regional Council commissioned the *Canterbury Regional Landscape Study* (Boffa Miskell Limited and Lucas Associates 1993) to help meet its obligations under the Resource Management Act. The study identified a number of regionally outstanding natural features and landscapes. These are summarised on Map 15. Most notable amongst these are:

- the Southern Alps/Kā Tiritiri o te Moana
- the Waitaki Basin and other intermontane basins of the Southern Alps/Kā Tiritiri o te Moana, Ashburton Lakes (Ō Tū Warekai), Waimakariri and Lake Sumner (Hoka Kura).
- braided rivers such as the Rakaia and Waimakariri (internationally significant examples of fluvial landforms)
- Banks Peninsula (as a whole it exhibits a distinct volcanically derived form)
- the limestone landscapes of the Castle Hill basin and Weka Pass (of cultural and scientific value)
- the Canterbury foothills (particularly Mounts Thomas and Oxford, and the Torlesse, Sefton and Puketeraki ranges)

The study is the most comprehensive assessment of Canterbury landscape to date, although Canterbury Regional Council and district councils are proposing or actioning additional landscape assessments for their areas. In the interim the Department will value the 1993 study as a basis for its work at national, regional and local levels.

Other landscape values may be important to retain even if they are not classified as a regionally 'outstanding landscape'. The Department will encourage the retention of these.

Current Management

As part of its efforts to conserve landscape values, the Conservancy seeks to identify, protect and interpret important landscape values on lands managed by the Department. In this it incorporates indigenous biodiversity, and Maori and European cultures to explain natural and cultural features, their value and significance. Existing commitments to landscape are to:

- address visitor needs and management requirements to avoid, remedy or mitigate adverse effects on the environment in an upgrade of Aoraki/Mount Cook Village
- provide advice on landscape values as part of the Department's involvement in the tenure review process (see 5.5.2 Statutory Land Management)
- assist in providing advice for regional and district plans, to encourage landscape and landscape values protection and enhancement.

Statutory Framework

Section 6 of the Conservation Act enables the Department to manage landscapes on land managed by the Department, and to advocate for landscape protection on other land. Landscape is defined in the Act as a 'natural resource'.

Section 3 of the Reserves Act 1977 enables the protection of landscapes. Such landscape may be protected for its natural or cultural values; in some instances both.

Under section 6(b) of the Resource Management Act, regional and district councils must recognise and provide for the protection of outstanding landscapes from inappropriate subdivision, use and development, to promote sustainable management.

Specific aspects of the landscape are included in other acts the Department administers, such as the National Parks Act. The Department also supports international organisations whose objectives are to promote and protect landscapes. These include the IUCN World Heritage Committee and ICOMOS (International Council on Monuments and Sites).

Objectives

- To assist in identifying Canterbury's landscapes and landscape values, assessing the threat they are under and seeking to protect and enhance the character, integrity and values of them in co-operation with other agencies, landholders, and communities.
- To manage operations on land managed by the Conservancy to conserve landscape integrity and conform to high standards of environmental design.

Implementation

The Conservancy will:

1. Ensure that regard is had to landscapes and landscape values throughout all aspects of the Conservancy's programmes and in particular by integration within the development of strategies for such as biodiversity and visitor services.
2. Maintain a GIS-based landscape database to provide an up-to-date inventory, based on the *Canterbury Regional Landscape Study* (1993) and other council assessments.
3. Give priority to landscape conservation where adverse change can be prevented and where the integration of well-planned and well-designed development is most critical to maintaining or enhancing existing quality and integrity.
4. Promote a greater understanding of and responsibility for landscape protection and management within the Conservancy through staff training.
5. Recognise the fundamental role of landscape in evaluating land for protection, classification and management.
6. Ensure, as far as possible, that all development, maintenance and restoration of lands managed by the Conservancy conform to high standards of environmental planning and design by:
 - the formulation and use of development procedures
 - improved techniques in EIA auditing for landscape

7. Complete and implement an approved village section of the *Mount Cook National Park: management plan* (1989). The plan is due for a full review by 1998.
8. Use landscape as a unifying theme for the Department's involvement in the tenure review process.
9. Liaise with key organisations and the community in issue resolution (e.g. wilding pines), resource information collection and decision-making relating to landscape conservation.
10. Advocate with landholders, communities, district and regional councils to adopt appropriate methods to:
 - protect, maintain and enhance landscape values in urban and rural landscapes. (The primary role for landscape advocacy off lands managed by the Department is seen to lie with communities and councils.
 - recognise and provide for natural character (including that of the coastal environment, wetlands, lakes and rivers and their margins)
11. Assist in increasing public awareness of and guardianship for landscapes and landscape values through interpretation and advocacy.

Priorities

Primary

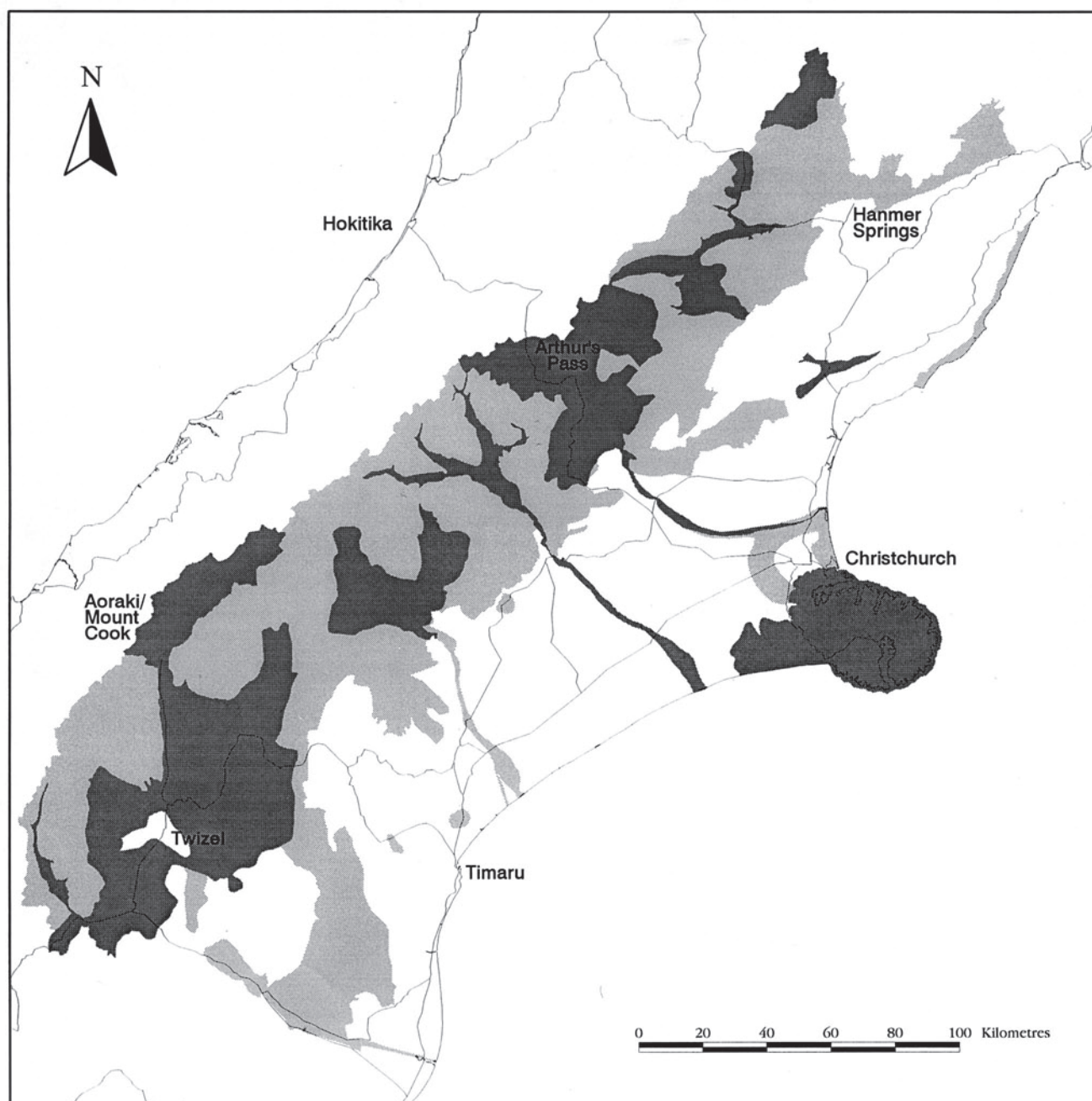
1. Maintain a GIS-based landscape inventory.
2. To ensure that ongoing regard is had to landscapes and landscape values protection. Table 17 sets out the key landscape priorities within place units.

Less Achievable Tasks

Tasks that may not be undertaken or completed include:

- landscape planning for small-scale developments with low impacts
- staff training on all aspects of landscape evaluation
- individual Resource Management Act consent screening to assess landscape implications
- local landscape awareness programmes
- regular liaison with land developers (Liaison will occur mainly for projects that have wide site or management implications.)

Map 15 Natural Features and Landscapes



- Regionally outstanding
- Regionally significant
- State highway

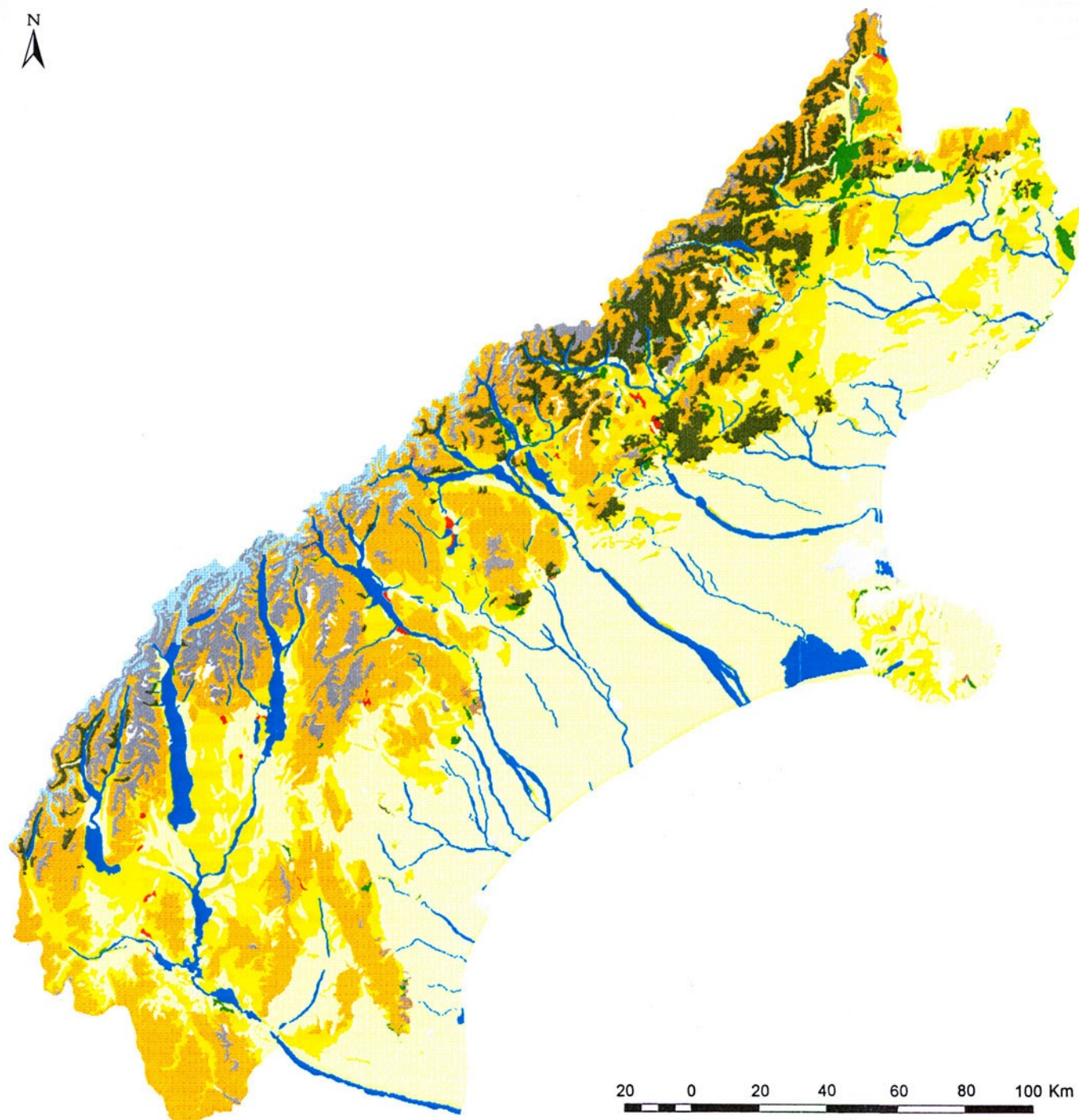
Source: Boffa Miskell Limited
and Lucas Associates, 1993

Table 17: Key Landscape Priorities

Theme	Issue	Method	Results Sought	Place
Banks Peninsula Landscape	1. Subdivision 2. Forestry	1. Community awareness 2. Liaison 3. Advocacy	1. Maintenance and protection of landscapes and landscape integrity 2. Maintenance of natural character of the coastal environment	Banks Peninsula
Lowry Landscape	Threats to coast, gorges and limestone features	1. Community awareness 2. Liaison 3. Advocacy	Maintenance and protection of landscapes and landscape integrity	Lowry
Waimakariri Landscape	1. Waimakariri Basin landscape changes 2. Lakes and river landscape changes 3. SH73 corridor 4. Exotic tree control	1. Community awareness 2. Liaison 3. Advocacy	Maintenance and protection of landscapes and landscape integrity	Waimakariri
Waitaki Landscape	1. Wilding trees 2. Forestry 3. Tourist facility development	1. Community awareness 2. Liaison 3. Aoraki/Mount Cook Village planning 4. Tenure review 5. Advocacy	1. Maintenance and protection of landscapes and landscape integrity (e.g. Lindis-Ahuriri) 2. Aoraki/Mount Cook Village redevelopment	Waitaki
Rangitata Landscape	Incremental agricultural intensification	1. Community awareness 2. Liaison 3. Tenure review 4. Advocacy	Maintenance and protection of landscapes and landscape integrity	Rangitata
Landscape Protection	Prevention of adverse effects on landscape	1. Conservancy regard to landscape and landscape values 2. Tenure review 3. Community awareness 4. Liaison 5. Advocacy	Maintenance and protection of landscapes and landscape integrity	All places



Map 16 Vegetation



Snow/Ice		Red tussock	
Water		Native scrub	
Urban		Exotic scrub	
Production		Podocarp/Hardwood forest	
Short tussock		Beech forest	
Snow tussock		Subalpine herbfield	

Source: Landcare - See LUC maps

5.2.3 Land Ecosystems

- identifying and protecting ecosystems
- rehabilitating or enhancing degraded ecosystems
- protecting significant landforms, physical processes, geological, fossil and soil sites.

Current Situation

Background

A dramatic transformation of the Canterbury landscape followed the arrival of humans. Before that time, the dominant feature was a diverse forest cover. Kānuka dominated the Canterbury plains, while the foothills and downlands supported mixed podocarp/broadleaf forest. The Mackenzie was predominantly beech forest transforming to tall tussock through fire. Coastal broadleaf forest was extensive, and coastal swamp and semi-swamp forest stretched discontinuously from Christchurch to South Canterbury. In North Canterbury, forest was continuous between the plains and the main divide.

Widespread fires and farming practices have resulted in the near complete loss of these and other lowland associations. In many places pastures or short tussock grasslands have replaced the original communities (in intermontane basins and lower hill country). Stock have destabilised coastal dunes, now almost universally replanted with exotic species, such as the widespread marram grass. Wetlands, (particularly along the coastal fringe of the plains near Christchurch and Te Waihora/Lake Ellesmere) have been extensively drained so that rivers and lakes now retain only a narrow zone of wetland communities.

Today, the overall indigenous character continues to be reduced, affecting both original and introduced communities. For example:

- In recent years, sand mining and marram invasion has damaged the nationally important sand dune association at Kaitorete Spit.
- In the high country, pastoralism and rabbit grazing over 140 years have depleted the indigenous communities. Hieracium is now common, particularly in short tussock grasslands of the Waitaki Basin.
- Podocarp/broadleaf forest remnants are very limited. In some instances they remain only as isolated pockets, exposed to drying winds and browsing that kill adult trees and prevent regeneration.

Map 16 shows present day vegetation and ecological districts.

The Department manages a relatively small proportion of the total land area in Canterbury, which in turn supports a disproportionately large amount of mountain land and intermontane ecosystem types. While these areas contribute greatly to the protection of natural values, they do not reflect the diversity of ecosystems present in Canterbury. Nor do they protect the communities most depleted by human occupation such as dry savannah woodlands (see Table 18).

Table 18: Canterbury Land Ecosystems

Ecosystem class	As % of pre-European vegetation	% remaining in Canterbury now	% remaining which is protected
Broadleaf/podocarp forest	4	<1	42
Beech/podocarp forest	11	5	79
Alpine tussock/ subalpine scrub	29	23	29
Lowland tussock/scrub	50	23	29
Swamp	4	<1	4
Sand	3	<1	4
Crops, exotic scrub/forest, native pasture, other pasture	N/A	41	1

Methods

Protection methods for areas with natural values can be negotiated for individual situations, and include:

- the purchase of fee simple title
- gift of fee simple title
- purchase of conservation covenant
- gift of conservation covenant
- lease
- exchange of land
- protection of private land agreement
- management agreement
- designation with a district plan
- secondary land use under Public Works Act
- Heritage Protection Order

Pastoral Leases

Crown pastoral leases under the 1948 Land Act make up a high proportion of Canterbury's land area. Since the 1850s land has been leased for pastoral purposes from provincial and central government. Lessees hold an exclusive right to the pasturage, the right to occupy, and the right to exclude trespassers. The cumulative impacts of cattle and sheep grazing, periodic rabbit booms, burning, topdressing, oversowing and *Hieracium* have significantly depleted the indigenous tussock cover over the last 140 years.

The 1986 environmental reforms saw changes with an agent (currently Knight Frank New Zealand Limited) being appointed by the Commissioner of Crown Lands to manage the pastoral leases on behalf of the Crown. The Government recently initiated tenure review taking into account that:

- the returns from the administration of Crown pastoral leases were well short of their administration costs
- the Crown may not necessarily wish to continue as landlord of pastoral leases
- some lessees wished to acquire a freehold interest in the most productive parts of their leases
- there is general public interest in protecting natural, historic and recreational values on many Crown pastoral leases

The Government is reviewing the Land Act to facilitate this tenure review process. The opportunity that may be presented by the land tenure review process offers a one-off mechanism to protect a huge range of the tussock grassland, shrubland and forest ecosystem types left in Canterbury. Tenure review processes can also involve other lands, by agreement, such as university endowments and freehold.

Geopreservation

Most protected natural areas in Canterbury were identified for aesthetic or biotic values. New Zealand also has a unique and diverse range of landforms, geological and soil heritage, resulting from a complex geological history. In Canterbury this is enhanced by our location on a zone between two of the earth's major crustal plates. While many earth science sites of significance are present on land managed by the Department, a representative range of the most important sites in Canterbury has not been protected.

Current Management and Advocacy

Existing land ecosystem management programmes of the Department largely reflect the predominance of mountain and beech forest ecosystems on land managed by the Department. Current management and advocacy programmes include:

- fencing protected areas to exclude stock and, where possible, rabbits and maintaining a major fencing network, conservatively estimated to be valued at several million dollars
- periodic PNA survey programmes funded in an *ad hoc* fashion
- negotiation with landholders about the implications of PNA surveys
- involvement in the tenure review processes
- advocacy under the Resource Management Act for effective methods that avoid adverse effects on significant areas of native vegetation and wildlife habitat
- several site restoration programmes, mainly around Christchurch and sponsored on a commercial basis, such as Ōtūkaikino wetland
- major habitat restoration programmes (e.g. Project River Recovery and Hurunui Mainland Island)
- research and management of a dry tussock grassland area, for example, Tekapo Scientific Reserve

- commenting on burning applications in the high country
- involvement with land care groups in high country areas
- pest, weed and fire control as outlined in later sections

Current Limitations

While the Department is involved in all of the above, some of these programmes are operating at maintenance levels only. For example:

- PNA survey programmes have occurred intermittently in the past few years and only 30 per cent of Canterbury has been surveyed (see Map 21)
- there is a lack of progress in protecting RAPs, although greater protection of RAPs should be afforded through the tenure review programme in high country areas
- there are many other restoration opportunities but lack of resources makes them prohibitive
- very little monitoring is occurring
- resource consent advocacy under the Resource Management Act is very low
- there needs to be a comprehensive assessment of the fencing needs and priorities of the Conservancy

Statutory Framework

Section 6 of the Conservation Act enables the Department to preserve and protect, and to advocate the conservation of natural and historic resources. This includes the identification and protection of areas representing New Zealand's natural diversity (Section 3, Reserves Act 1977). This advocacy role also enables the Department to promote implementation of Section 6 of the Resource Management Act 1991 and the New Zealand Coastal Policy Statement through district and regional plans.

Tenure review of pastoral leases in the high country proceeds under the Land Act 1948. Boundary fencing is provided for under the Fencing Act 1978.

The Department has a role in providing advice to the Secretary of Forestry under s.67F of Part IIIA of the Forests Act 1949 in approving sustainable forest management plans and permits.

The permitting of taking rock, soil, plant and animal samples and specimens for non-commercial research, and bioprospecting is addressed in 5.5.5 (Research).

Objectives

- To systematically identify all of Canterbury's land ecosystems by 2010, assess their value for indigenous biodiversity, and seek to protect a range of areas and values that best contribute to maintaining and restoring Canterbury's indigenous biodiversity.
- To systematically identify and seek to protect significant landforms, geological features and related systems on and off land managed by the Department.
- To systematically identify the management needs for natural values on land managed by the Department and prioritise management to maintain or enhance Canterbury's indigenous biodiversity and natural processes.
- To negotiate with Crown pastoral leaseholders, directly or through tenure review, to protect natural values.
- To increase public awareness of the need to protect Canterbury's indigenous biodiversity and promote community awareness and participation in protecting natural systems, values and processes.
- To systematically record the Conservancy fencing network, assess its condition, and prioritise new or maintenance fencing to meet indigenous biodiversity and statutory priorities.
- To restore viable natural communities in order to maintain and enhance Canterbury's indigenous biodiversity.
- To provide advice to the Secretary of Forestry in approving sustainable forest management plans and permits.

Implementation

The Conservancy will:

1. Consider preparing an ecosystem protection strategy. The strategy must be consistent with and assist in the implementation and achievement of this CMS (see 6.1 Conservation Management Plans and Functional Strategies).
2. Systematically identify the values of land managed by the Department.
3. Set priorities for land significance and management by the Department. The following criteria, derived from O'Connor *et al.* 1990, will be used to determine the priorities for area significance:

Rarity	Lack of numbers or occurrence of a species or community.
Distinctiveness	A measure of the 'specialness' of a community or ecosystem.
Diversity	A measure of the different species, communities, ecosystems, habitats, landforms, environmental gradients and processes found in an ecosystem.
Naturalness	A measure of the lack of disturbance by humans and introduced species.
Viability	A measure of the long-term (ecological) viability of a site.
Representativeness	A consideration of all of the above and how well these are reflected for any given ecosystem at a particular site.
Shape and size	A site's shape and size are important factors affecting a species' or community's viability. The principles of biogeography generally mean that larger areas with a compact shape are the most effective for the protection of natural areas for nature conservation purposes.
Other	Any other relevant ecological criteria.

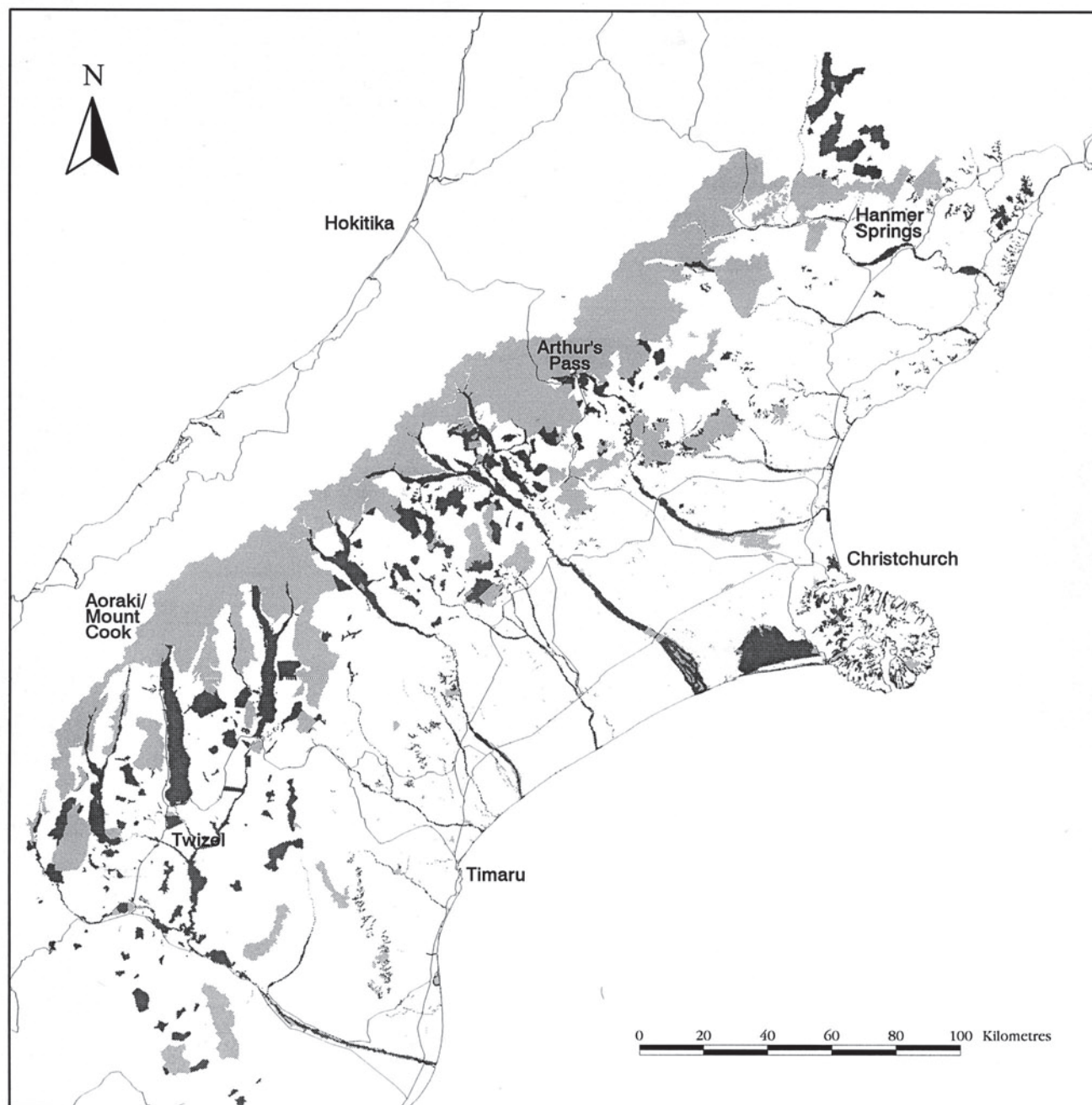
Priorities for management for land ecosystems values will then be set on the basis of:

- the natural significance of the value identified
 - the types and level of threat to each identified value
 - the value of the management gain from the effort directed at the threat to each identified value
 - optimising the management gain across the range of values in the Conservancy and nationally
4. Utilise the criteria in Implementation 3 when considering proposals for the formal protection of nature conservation values (see also 5.5.2 Statutory Land Management).
 5. Undertake comprehensive ecological surveys in priority ecological districts across the Conservancy and support initiatives to protect land identified in survey reports (see also 5.5.4 Survey and Monitoring). Criteria that will be used to determine future priorities for ecological surveys include:
 - the relative area remaining of a community type and the level to which it is protected in the conservancy and ecological district
 - the 'naturalness' (diversity, cover composition) of the remaining portions of the community
 - whether there are species in the community of special significance (endemism, nationally threatened, distributional interest)
 - the presumed level of threat to remaining elements of the community, and the ability to control these directly or to re-create the community in a new location
 6. Participate in land care groups to discuss matters of mutual interest, for example, weed control, land degradation, rabbits, ecosystem and landscape conservation, *Hieracium* and wilding tree spread.
 7. Contribute effectively to tenure review of pastoral leases by:
 - identifying and describing natural values
 - providing this information to landholders and Knight Frank (New Zealand) Limited.
 - negotiating to protect the natural values
 8. Share information (such as text and map information) with local authorities to assist with recognising and providing for significant native vegetation, wildlife habitat, significant landforms and geological features for inclusion in regional and district plans.
 9. Advocate for effective and efficient methods in regional policy and regional plans, and district plans, to avoid the adverse effects of development on native vegetation and wildlife habitat. The following database sources provide the basis for assessing significant native vegetation and wildlife habitat:
 - PNA – Protected Natural Area surveys
 - WERI – Wetlands of Ecological and Representative Interest
 - SSWI – Sites of Special Wildlife Interest.

Known sites of natural significance are shown on Map 17.
 10. Develop and maintain positive relationships at an individual farmer-level and with Federated Farmers' branches and offices over nature conservation issues, especially regarding the protecting of significant native vegetation and wildlife habitat; and promote formal protection methods.
 11. Liaise with conservation groups, Fish and Game Councils, QEII Trust, Federated Farmers and other interest groups to enhance opportunities for protecting land with significant native vegetation and wildlife habitat.
 12. Apply to the Land Acquisition, Forest Heritage or Ngā Whenua Rāhui Funds for finance to implement legal protection of areas identified for their natural values. Advice and administrative support will be provided to individuals or groups making applications to the Forest Heritage or Ngā Whenua Rāhui Funds as resources permit. For disposal and exchange criteria see 5.5.2 (Statutory Land Management).

Map 17: Sites of Natural Significance

Map 17 Sites of Natural Significance



- Areas of natural significance outside areas managed by the Department*
- State highway
- Land managed by the Department

Footnote: *Natural Significance areas are those currently identified in the following of:
-SSWI data - Sites of Special Wildlife Interest (ex Wildlife Service Habitat data)
-WERI data - Wetlands of Ecological and Representative Interest
-PNA data - Protected Natural Area Surveys (Lands and Survey, DOC)

13. Meet boundary fencing requirements in accordance with the Fencing Act 1978 where appropriate, following consultation with landholders.
14. Develop a GIS-based fencing inventory and, if needed, a strategy that:
 - outlines the present network, its condition and future effective life
 - details existing maintenance and replacement needs and costs
 - outlines ecosystem protection priority requirements as defined in Implementation 3
 - outlines present statutory priorities

The inventory and strategy will assist in the implementation and achievement of this CMS.
15. Select, where feasible, fence lines on survey boundaries. In other circumstances, such as difficult terrain, select fence lines that will best protect the area's natural, landscape, historic or recreational values.
16. Undertake restoration initiatives in Canterbury where:
 - the restoration approach is planned, monitored and reviewed
 - the focus is to preserve biodiversity (communities and species), as opposed to reacting to unexpected damage
 - consultation with papatipu rūnanga has occurred
 - the project will realise significant gains in enhancing Canterbury's indigenous biodiversity
17. Support restoration programmes on land managed by the Department that:
 - provide opportunities and support for community groups and the public generally to undertake restoration of communities on land managed by the Department.
 - use material of appropriate genetic origin that is ecologically appropriate to the situation
 - use techniques that replicate natural process as closely as possible
18. Foster joint restoration programmes with Ngāi Tahu.
19. Encourage community restoration of native vegetation on privately owned land, for important natural features requiring restoration. As part of this process the Department will:
 - provide information on native species that are useful for restoration
 - provide restoration guidelines
 - contribute to and develop a database of such programmes
 - continue plantings around the Department's Motukarara Nursery that demonstrate the distinctive plant associations of Canterbury
20. Continue oversight and practical contribution to Tū Kakariki projects, such as the existing Ōtūkaikino and Estuary of the Heathcote and Avon Rivers/Ihutai sponsorship programmes, continue restoration research of the Tekapo Scientific Reserve, and continue joint rehabilitation, with rūnanga, of the mined area at Kaitorete Spit (see also 5.1.3 Community Participation and 5.5.5 Research).
21. Maintain, upgrade and make available a departmental GIS database of geopreservation sites prepared by the joint Earth Science Working Group.
22. Liaise with the joint Earth Science Working Group on site recording and management.
23. Develop and implement methods to protect important or vulnerable geological sites and landforms on land managed by the Department.
24. Monitor a range of ecological systems in Canterbury to identify rates and cause of ecological change and, if necessary, identify remedial actions (see 5.5.4 Survey and Monitoring).
25. Support research that contributes to:
 - understanding process and the way natural processes can be sustained in the presence of human-induced threats
 - evaluation of the effectiveness and economics of natural area assessment and protection (see 5.5.5 Research)
26. Provide prompt advice on the natural values, flora and fauna, and representative areas affected by applications for sustainable forest management plans and permits.
27. Provide prompt advice on the natural values, flora and fauna, and representative areas affected by applications for burning permits under the Land Act and Resource Management Act processes.

Priorities

Primary

Ecological surveys will be undertaken in the high country to facilitate tenure review. Where resources permit, surveys will also be undertaken in areas which are little known or where there are the greatest threats to indigenous ecosystems, such as in the North and South Canterbury foothills.

Where boundary fencing is required, the provisions of the Fencing Act 1978 will be met. All fences that meet criteria for rabbit control and stock-proofing will be maintained. A conservancy fencing inventory will be prepared, and a strategy may follow.

Secondary

The main objective of earth science conservation in Canterbury is to ensure the survival of the best representative examples of geological features, landforms, soil sites and active physical processes, so that the geological history of New Zealand, its landforms and the evolution of its biota can be understood. The main barrier to achieving this objective previously has been a lack of information about earth science sites. This situation has now improved following the collection and computerisation of the Geopreservation Inventory in 1992.

Conservancy restoration priorities will continue to have strong support.

Priority Sites and Ecosystems

The priority protection sites have yet to be objectively identified in many areas. Nevertheless there are many sites both within, and outside of, lands managed by the Department that have acknowledged natural features and values which require recognition and protection. These sites and processes are shown in Table 19.

The priority sites and themes have been selected on a qualitative assessment of natural values and areas that require management, using the criteria in Implementation 3. If implemented, an ecosystem protection strategy will provide a more objective focus for management. In the meantime, the programmes shown in Table 19 will contribute to important outcomes of land ecosystems management.

Less Achievable Tasks

Tasks that may not be undertaken or completed include:

- negotiations for protection of natural values
- the purchase of areas containing significant natural features
- full rabbit fencing in important areas and the completion of fencing elsewhere
- major restoration programmes (beyond Project River Recovery and Hurunui Mainland Island Habitat)
- full PNA surveys across all of Canterbury
- participation in all Resource Management Act processes to protect significant natural vegetation and wildlife habitat

Table 19: Key Land Ecosystems Priorities

Theme	Issues	Methods	Results Sought	Place
Landscape Management	How best to protect indigenous biodiversity and landscape values in the Banks Peninsula Unit	1. RMA advocacy 2. Covenants 3. Fencing 4. Purchase 5. Animal control	Protection of a representative range of Banks Peninsula ecosystems	Banks Peninsula
Sand dune protection: restoration and cultural appreciation	How best to protect the natural and cultural values of Kaitorete Spit	1. Restoration of pingao 2. Plant pest control (specifically marram grass and boneseed) 3. Rabbit control 4. Rūnanga input into management	Maintenance and enhancement of the natural and cultural values of Kaitorete Spit	Plains
Resource Management Act Advocacy	How can RMA processes be used to manage adverse impacts on native vegetation and wildlife	1. Economic instruments 2. District and regional plan rules 3. Information provision 4. Riparian protection 5. Environmental compensation	Avoiding, remedying or mitigating impacts on significant native vegetation and wildlife habitat	All places
Restoration	How to best enhance indigenous biodiversity in Canterbury	1. Volunteer projects 2. Sponsorship 3. Research 4. Mining rehabilitation	Community and Conservancy involvement in enhancing areas of natural value	All places
Ecological survey, Protected Natural Areas Programme, and protection implementation	How to best identify and protect indigenous biodiversity in the unit	1. Tenure review 2. RMA advocacy 3. Covenants 4. Animal and plant pest control 5. Fencing 6. Purchase 7. Ecological survey	Identification and protection of a range of ecosystems in the unit	All places (Note: Banks Peninsula PNA survey completed)
Mountain forests: Hurunui Mainland Habitat Islands	Manage major restoration programme for endangered species' habitats	1. Pest and predator control 2. Weed control 3. Research 4. Sponsorship 5. Advocacy	Establishment of sustainable populations of key species	Hurunui

5.2.4 Freshwater Ecosystems

- protecting freshwater ecosystems and fisheries and preserving indigenous fish
- providing appropriate fish passage
- controlling exotic fish, and managing the transfer or release of live aquatic life
- managing commercial access to eel harvesting in areas managed by the Conservancy
- managing the effects of water storage, diversion and extraction proposals on aquatic habitats, land, wildlife and fisheries managed by the Department

Current Situation

Background

Before European settlement, freshwater habitats in Canterbury provided an abundance of mahinga kai and resources for Māori and were of great importance to them. Freshwater habitats in Canterbury have been progressively modified and degraded since European settlement. The challenge now is to ensure that these are not degraded any further, and that critical habitats are restored or enhanced.

Braided rivers are a special feature of Canterbury and are nationally significant for their indigenous fauna and flora (best known for their distinctive birdlife), along with their high country lake and tarn systems. The larger rivers are at least regionally significant, and have recreational and scenic values, particularly in their gorge and mouth sections.

Lowland aquatic habitats around the smaller rivers and streams, once characterised by slow-moving water and usually shrouded under forest or linked by extensive wetlands, are now heavily modified or lost. Extensive lowland freshwater wetlands formerly graded into brackish or estuarine wetlands but now only remnants remain. These lowland wetlands may be only locally significant themselves but collectively contribute to an important regional or national complex for migratory birds and fisheries. They also help regulate waterway flows. The lowland aquatic habitats are only a fragment of their former extent. They are therefore a high priority for protection and restoration; for both their natural and their recreational values.

The coarse gravel layers of the Canterbury plains contain a rich variety of invertebrates adapted to life in the underground aquifers. While knowledge of invertebrate species is poor, they and their habitats are considered secure.

The rivers, lakes and streams sustain populations of sports fish. The region's quinnat salmon populations are of national recreational significance and some trout streams are increasingly recognised overseas as well as locally. Historically, freshwater allocation was pursued in an *ad hoc* and reactive manner, heavily favouring productive uses. In many rivers, such as the Ashburton/Hakatere and Ōpihi, the water abstraction is too great for the maintenance of natural values. Many lagoons and lakes are polluted, and require improved management, appropriate to their trophic state. Te Waihora/Lake Ellesmere, Wainono Lagoon, and Lake Alexandrina (Takamoana) are the most notable. While Te Waihora/Lake Ellesmere and Lake Alexandrina (Takamoana) are dramatically different in their 'pollution' levels, both are 'polluted' relevant to their trophic states (eutrophic and mesotrophic respectively).

Protection of the Canterbury high country is essential to preserve the flow of high quality waters that feed Canterbury's lakes and rivers and helps to maintain good water quality in the lowlands. Deterioration of water quality in the high country would increase the threats that affect lowland freshwater systems. Riparian protection has been proven to be an effective tool in helping to protect freshwater ecosystems from adverse impacts.

The future of some species is also of concern. The numbers and size of both long- and short-finned eels (tuna) have been significantly reduced by habitat destruction (wetland drainage), barriers to migration (damming) and fishing pressure. Of particular concern are the stocks of long- and short-finned eels in Te Waihora/Lake Ellesmere and long-finned eels in high country lakes. Fisheries scientific advice has identified the value of non-commercial fishing reserves which, along with MFish harvesting controls and attention to fish passage, should ensure migratory eel escapement, and stocks should recover. Eel management committees (EMCs) have been established between MFish, Ngāi Tahu and commercial eelers, with the Department involved on habitat issues and access to land managed by the Department.

In Canterbury, like most other areas in New Zealand, the critical issue for maintaining healthy freshwater fisheries and wildlife (native or introduced) is the maintenance of the quality and quantity of the habitat available. Habitat protection for freshwater ecosystems includes maintaining flows and water quality for a range of aquatic organisms; protecting and enhancing riparian vegetation, ideally using native plants; avoiding damage to river and lake beds from excessive disturbance or sedimentation; and the control of undesirable introduced plants or animals.

The Resource Management Act requires regional councils to manage Canterbury's freshwater ecosystems in an integrated and sustainable way. District council management of land uses and subdivision can also seek to avoid, remedy or mitigate adverse effects on freshwater ecosystems.

Te Waihora/Lake Ellesmere has long been recognised as meeting the nomination criteria for an IUCN Wetland of International Importance but nomination has been postponed pending the outcome of the Ngāi Tahu claim settlement.

Threats

Major threats to all these ecosystems include: existing and potential dams; water abstraction and reduced flows; enrichment of both surface and groundwater; riparian degradation; pollution; artificial channelling of rivers; weed growth; illegal fish liberation; sports and indigenous fish competition; commercial eel fishing pressure; blocking of migratory fish passage; inappropriate recreational activity; riverbed engineering work; and wetland drainage or lowered water levels for both agriculture and urban purposes. Often these threats act together and accentuate the impact.

Project River Recovery

Within the Waitaki Basin the Department runs Project River Recovery, funded by Electricorp New Zealand Limited as part of the 1990 ECNZ Waitaki Water Rights Working Party Agreement. This project involves extensive creation and maintenance of a braided river and wetland habitat for a range of species and extensive habitat research applicable to other braided river areas.

Water Storage

Hydro investigations have been carried out on several rivers in the Conservancy, notably the Waitaki, Ōpuha and Hurunui rivers and Forks Stream. Other proposals exist for combined hydro/irrigation dams on the Ōpihi and Ashburton/Hakatere rivers.

Protection Projects

The Ahuriri, Tasman, Godley, Cass, Upper Rangitata, Ashburton/Hakatere, Rakaia, Waimakariri, Ashley/Rakahuri, Hurunui and upper Waiau rivers have very high wildlife, fisheries and recreational values. Few wild river systems now exist in their lower catchments on the east coast of the South Island. Wild river systems are nationally and regionally important. Water Conservation Orders protect the Ahuriri and Rakaia rivers and Te Waihora/Lake Ellesmere. Any proposals that would have significant adverse effects on these water bodies would be of particular concern to the Department. Current Departmental freshwater protection projects in Canterbury include:

- provision of freshwater fish passage
- monitoring the implementation of the Ahuriri, Rakaia, and Lake Ellesmere Water Conservation Orders and potential challenges to the orders
- input into RMA Regional Plans to specify adequate flow regimes and riverbed rules to protect freshwater habitats and species and safeguard the life-supporting capacity of ecosystems (particularly the Ashburton/Hakatere, Ōpihi and Waimakariri rivers)
- Project River Recovery (PRR) habitat enhancement in the upper Waitaki catchment
- Canterbury mudfish/kōwaro surveys and protection programmes at Hororata and Dog Kennel Stream
- advising local communities and interest groups that a Hakatere Ecological District Water Conservation Order is being considered

Current Limitations

Important areas where there is currently little freshwater work include:

- protecting a representative range of Canterbury's natural freshwater ecosystems
- protecting giant kōkopu and Canterbury mudfish/kōwaro sites
- protecting inanga (whitebait) habitats generally, such as the Ashley River/Rakahuri
- ensuring regional plans provide adequate flow regimes and water quality for the maintenance of life-supporting capacity for Canterbury's birds, invertebrates, and freshwater ecosystems generally
- advocating for riparian protection generally

Statutory Framework

Section 6(ab) of the Conservation Act enables the Department to 'preserve so far as practicable all indigenous freshwater fisheries, and protect recreational freshwater fisheries and freshwater fish habitats'. Part IIIA provides for the development of management plans for particular habitats and species, including freshwater fisheries. Section 6(c) enables the Department to promote the benefits of conservation to present and future generations. Under s.26ZH of the Conservation Act, Ngāi Tahu retain their traditional freshwater fishing rights. Regulations to provide for the management of these rights are currently in development.

The Freshwater Fisheries Regulations 1983 regulate fish passage and enable the Department to require fish passes or screens where new structures impede the natural movement of fish upstream or downstream in any natural water body. The regulations also apply to existing structures when RMA consents are renewed. Part VIII of the regulations provides for the control of noxious fish (as detailed in the third schedule of the regulations).

Section 26ZM of the Conservation Act sets criteria for when the Minister's approval is required for the transfer or release of live aquatic life (plant or animal, except birds) into new locations or to land or water managed by the Department.

The Department administers the Whitebait Fishing Regulations 1994 that control the taking of whitebait in Canterbury. The taking of native fish for private human consumption is not regulated; except for eels (controlled by the Ministry of Fisheries under the Fisheries Amateur Fishing Regulations 1986).

Special provisions in the Fisheries Amateur Fishing Regulations allow for the taking of eel for hui and tangi. Lake Forsyth (Wairewa) is reserved for the harvest of eel by Ngāi Tahu only.

The Ministry of Fisheries controls all commercial eel and flounder fishing. The Department must, however, authorise any commercial harvest on rivers or lake-beds administered under the Conservation Act. Commercial eel fishing in National Parks is subject to the provisions of the Minister's approval and the relevant management plan. Section 50 of the Reserves Act regulates eel fishing in reserves.

The Conservation Act 1987 (Section 26Q) defines the functions of Fish and Game Councils. Two councils are in the Canterbury Conservancy: North Canterbury Fish and Game Council (NCFG) north of the Rakaia River; and Central South Island Fish and Game Council (CSIFGC) south of the Rakaia. The councils are responsible to the Minister of Conservation for maintaining and enhancing sports fisheries and habitat; and managing sports fish (trout and salmon) and coarse fish (tench and perch). The Department liaises with the councils on these functions to provide mutual benefits for freshwater fisheries.

Under the Freshwater Fisheries Regulations 1983, some 20 fish species are 'noxious' due to their potential to disrupt freshwater ecosystems. Noxious fish include rudd, koi, carp, piranha and catfish. The Department is responsible for the control and management of noxious fish.

Under the Resource Management Act the Canterbury Regional Council administers the allocation of water, discharges to it, and the management of river and lake-beds. District councils have primary responsibility for controlling the effects of land use and for surface activities on lakes and rivers. The provisions of the regional policy statement and other regional plans (Canterbury Regional Council) guide the controlling of activities' effects within our freshwater ecosystems. In the preparation of these documents, the councils must have regard to the provisions of this CMS regarding lands and species managed by the Department. Under s.5 Resource Management Act, the Regional Council must safeguard the life-supporting capacity of freshwater ecosystems.

Generally, the boundary used in this document between a 'freshwater' and 'marine' ecosystem is the coastal marine area boundary as defined by the Resource Management Act 1991. This excludes estuaries and river mouths from section 5.2.4 (Freshwater Ecosystems) except where, by statute, the Department's 'freshwater' fisheries management responsibilities include estuaries, coastal lagoons, and sea areas off river mouths.

Objectives

- to protect and enhance the life-supporting capacity of Canterbury's freshwater ecosystems for their intrinsic state and for their habitat values for birds, fish and invertebrates
- to preserve and enhance indigenous freshwater fisheries and habitats
- to recognise Ngāi Tahu existing freshwater fishing rights
- to liaise with Fish and Game Councils to protect recreational freshwater fisheries and freshwater habitats
- to eradicate, contain or control noxious fish in Canterbury freshwater and prevent the undesirable introduction of new aquatic species to Canterbury freshwater
- to ensure appropriate fish passage is provided where structures impede the natural movement of fish in any natural body of water

- to improve public awareness of freshwater ecosystems and fish, and their associated management
- to avoid, remedy or mitigate the adverse effects of water storage and extraction facilities on freshwater ecosystems with significant wildlife, fishery or recreational values

Implementation

The Conservancy will:

1. Seek appropriate provisions in regional and district plans and policy statements, and in resource consents that:
 - protect freshwater ecosystems, birds, fish and invertebrates from the adverse impacts of riverbed and water surface disturbance
 - safeguard the life-supporting capacity of freshwater ecosystems throughout Canterbury
 - establish water flows and levels in natural water bodies that are sufficient to preserve the natural pattern of flow or water level change, morphology, bed type, gradient and the desired water quality. Where abstraction is considered acceptable, generally minimum flows for all water bodies should be maintained so that they do not fall below the average annual low flow, or such naturally occurring low flows as may occur.
2. Clearly identify freshwater ecosystem values and life-supporting requirements in submissions on water and land use planning processes under the Resource Management Act.
3. Share information (such as text and map information) with local authorities to assist with recognising and providing for significant freshwater ecosystems and their species, for inclusion in regional and district plans.
4. Support the investigation and application of appropriate protection mechanisms, including Water Conservation Orders, for (in order of priority):
 - Hakatere Ecological District waters (upper Ashburton/upper Rangitata/Ashburton lakes)
 - Upper Hurunui River

The Conservancy will also support protection mechanisms for the waters identified in the limitations section.
5. Promote the maintenance of riparian protected areas and the extension of riparian protection through Resource Management Act processes and community liaison.
6. Carry out surveys and monitoring to determine the vulnerability of freshwater species and habitats in the Conservancy.
7. Develop programmes for the enhancement of inanga (whitebait), giant kōkopu and Canterbury mudfish/kōwaro.
8. Identify and seek protection of whitebait spawning sites (such as the Ashley River/Rakahuri), and increase public awareness of the Whitebait Regulations and whitebait habitats.
9. Advocate, with Eel Management Committees, through RMA processes and district council by-laws, to protect eel habitats from adverse effects, and otherwise ensure the preservation of the eel fishery.
10. Allow access for commercial eeling, subject to conditions, on lands managed by the Department at Te Waihora/Lake Ellesmere. Access is unlikely to be approved for any other areas managed by the Conservancy.
11. Liaise and work with Ngāi Tahu to share information and preserve and protect freshwater ecosystems. This could involve joint action on many section 5.2.4 (Freshwater Ecosystems) implementation statements.
12. Implement any agreed Te Rūnanga o Ngāi Tahu and Crown protocols concerning eels and whitebait.
13. Implement the Ngāi Tahu Claims Settlement Act 1998 where it relates to freshwater systems (particularly Te Waihora/Lake Ellesmere, Wairewa/Lake Forsyth and other coastal lagoon systems).
14. Maintain liaison with Fish and Game Councils to ensure matters of mutual interest in terms of habitat protection and recreational and indigenous species conservation are met. This could involve joint action on many section 5.2.4 (Freshwater Ecosystems) implementation statements.
15. Encourage Fish and Game Councils to continue evaluations on the effects of lead shot in freshwater ecosystems.
16. Consider, subject to conditions, applications for the transfer or release (under Section 26ZM of the Conservation Act) of fish or other aquatic life into locations where they did not occur previously in accordance with the following criteria:
 - the public process of Section 26ZM(4) of the Conservation Act has been followed
 - the adverse effects on indigenous fish, sports fish and aquatic invertebrates will be minimal
 - the aquatic life will not spread into waters of high natural value nor where a high indigenous component is present

- the adverse effects on the physical and chemical environment will be minimal
 - an EIA or risk assessment of the proposed transfer or introduction has been prepared (see 5.5.6 Environmental Protection)
17. Co-ordinate with Fish and Game Councils to control, contain or eradicate, where practicable, noxious fish species and unauthorised aquatic life releases. The recovery of associated costs will be considered, particularly for illegal releases (see 5.5.6 Environmental Protection).
 18. Develop minimum standards that may be applied in meeting the Fish Passage Regulations, in co-operation with Fish and Game Councils, Te Rūnanga o Ngāi Tahu and local and regional authorities; and promote these standards for inclusion within regional plans prepared by the Canterbury Regional Council.
 19. Promote a Braided River Care Code that covers source to sea, including lagoons, in co-operation with Canterbury Regional Council.
 20. Provide research findings to regional and district councils to promote braided river habitat protection.
 21. Seek IUCN Wetlands of International Importance status for Te Waihora/Lake Ellesmere, subject to the agreement of Te Rūnanga o Ngāi Tahu and working to the *Guidelines for nominating wetlands of international importance in New Zealand* (1991).
 22. Raise public awareness of indigenous fish protection issues through news and other media.
 23. Implement the ECNZ-funded Project River Recovery in the Mackenzie Basin by maintaining an enhancement programme in Tekapo, Twizel and Ahuriri rivers and other Waitaki catchment wetlands.
 24. Advocate through RMA processes that water storage and abstraction proposals avoid nationally and regionally significant wild river systems (for example, through regional policy statements, regional plans, district plans and resource consents).
 25. Advocate through RMA processes that the adverse effects of water storage and abstraction proposals on managed river systems be remedied or mitigated.
 26. Seek to avoid, remedy or mitigate the adverse effects on natural, historic or recreational values of water storage and abstraction proposals on land managed by the Department. This may include assessing the potential for net conservation benefit through compensation or other means.

Priorities

Priorities for the Conservancy are to:

- advocate for freshwater ecosystem protection through RMA processes and community liaison
- administer freshwater fisheries legislation for which the Department is responsible; conserve and manage freshwater fisheries and habitats, recognising Treaty of Waitangi principles
- survey and research to assist in freshwater ecosystem protection
- continue Project River Recovery within Waitaki Basin wetlands
- undertake habitat protection for nationally significant and vulnerable fish species, such as Canterbury mudfish/kōwaro, inanga, giant kōkopu
- liaise closely with Ngāi Tahu and Fish and Game Councils on habitat protection and enhancement
- ensure adequate fish passage in natural waterways
- prepare Water Conservation Order applications (WCO), for the Hakatere Ecological District and the upper Hurunui
- investigate Wetland of International Importance status for Te Waihora/Lake Ellesmere

Less Achievable Tasks

Tasks that may not be undertaken or completed include:

- investigations and submissions on all water discharge and riverbed permit applications
- complete policing of the fish passage regulations
- noxious fish eradication
- investigating alpine galaxid habitat
- investigating Water Conservation Orders or other protection mechanisms for Lake Ōhau, the Waimakariri Gorge and upstream waters

Table 20: Key Freshwater Ecosystems Priorities

Theme	Issue	Method	Results Sought	Place
RMA advocacy	Freshwater ecosystem (including habitats and species protection)	1. Seeking RMA rules 2. Signs/interpretation	Riparian protection; adequate flow regimes, water levels, water quality of bed habitat, and water surface	All places
Fish passage	Indigenous and sports fish life cycles	1. Fish passage consents 2. Developer liaison 3. Fish and Game Council liaison	Fish passage maintained	All places
Water Conservation Orders and/or other appropriate protection measures	Outstanding freshwater ecosystems protection	1. Water conservation orders 2. IUCN – WII status	Water flows, levels, and quality protected and riverbed habitats and spawning grounds appropriately managed	Hurunui (Upper Hurunui River and lakes), Waimakariri (Waimakariri rivers and lakes), Plains (Te Waihora/Lake Ellesmere and coastal estuaries), Rangitata (Haketere Ecological District WCO) Waitaki (Lake Ōhau)
Indigenous fishery management planning	Indigenous fish habitat protection	1. Canterbury mudfish plan 2. Riparian protection/ rehabilitation 3. RMA advocacy 4. Ngāi Tahu liaison	Habitat and species protected, mahinga kai protection	All places
Project River Recovery	Braided river and other wetlands restoration and enhancement	1. Willow/weed clearing 2. Signs/interpretation 3. Captive breeding and release 4. Community liaison	Wetland habitat in the Waitaki enhanced	Waitaki

5.2.5 Marine Ecosystems

- protecting marine mammals
- processing applications for and managing marine reserves
- advocating the protection of marine life and oceanic ecosystems generally

Current Situation

Background

Canterbury's coastal and marine ecosystems and their protection are seen as increasingly important. They are affected by a range of activities and management processes. Pollution of sea water is a growing public concern, particularly around Timaru, Lyttelton Harbour/Whakaraupō and within the Estuary of the Heathcote and Avon Rivers/Ihutai. There has been increasing interest in marine farming around Banks Peninsula. The Conservancy seeks to monitor and respond to developments that could harm the ecology of harbours and bays in the area.

Marine Reserves

Marine reserves protect areas for scientific study of marine life and provide a level of protection for marine ecosystems similar to national parks. The Department wishes to see a number of reserves established in the Conservancy to protect representative examples of marine ecosystems that will serve as benchmarks for comparison with other areas. Universities, research and recreation groups, or authorities administering reserves fronting the coast may also apply for the establishment of marine reserves.

Marine Mammals

Canterbury waters support a diverse range of marine mammals including rare species such as the pygmy, right and beaked whales/tohorā. More commonly observed species such as Hector's dolphin/upokohue, fur seals/kekeno and pilot whales are also present in Canterbury. While mass strandings of marine mammals are uncommon in Canterbury, the Department has developed a plan for dealing with isolated strandings, deaths, entanglements and minimising the disturbance of seals (for example, Dumbo the elephant seal on his visits to Christchurch's coastline). Some marine mammal parts such as bones and teeth are of special significance to Ngāi Tahu, and dead specimens can also be important for scientific research.

Current Management

Currently the Department undertakes a variety of marine activities:

- The Conservancy uses the Coastal Resource Inventory as an information base that can be expanded as further information comes to hand. As part of the process established for restricted coastal activities, it identified areas of significant conservation value (ASCV) in the coastal marine area. The Conservancy has also surveyed the sub-tidal and inter-tidal communities of Flea Bay and Akaroa and Timaru harbours to increase understanding of their ecology and natural significance.
- The Department facilitates the distribution of marine mammal parts for traditional and scientific use.
- There are several commercial operations watching dolphins and seals around Banks Peninsula. The Department monitors and liaises with operators to ensure they meet the requirements of the regulations and marine mammal-watching permits.
- In 1988, following concerns about the impact of set-netting practices on Hector's dolphin numbers around Banks Peninsula, the Department established a Marine Mammal Sanctuary. This extends from the Rakaia river mouth to Sumner Head and offshore for a distance of four nautical miles. The sanctuary places restrictions on the use of set-nets to reduce the incidental catch of Hector's dolphin during the summer period when dolphins concentrate inshore to feed and breed.
- The Department is involved with ongoing research on the ecology of Hector's dolphin, in collaboration with the New England Aquarium of Boston.
- The Department works closely with community volunteers, notably Marine Watch, in dealing with incidents involving marine mammals.
- No marine reserves exist in Canterbury. However, the Department has received two formal applications for marine reserves on Banks Peninsula, one at Dan Rogers within Akaroa Harbour, and another at Flea Bay. A biological survey of Timaru's reef systems was completed in 1992 with a view to encouraging their protection.
- The Department also has a role in providing assistance and expertise in caring for oiled wildlife such as penguins and shags.

Current Limitations

Little current work is being done in the following areas:

- a programme of marine survey work
- marine reserve promotion and implementation
- marine ecosystem and species monitoring

Statutory Framework

The following description of the Department's role in the coastal marine area under the Resource Management Act is for information purposes. It is relevant to the extent to which it influences other Departmental responsibilities under the Conservation Act and Acts in the first schedule. It is not intended to restrain the Minister's discretion under the Resource Management Act.

Under the Resource Management Act 1991, the Minister of Conservation has a range of coastal functions. The Conservancy provides information to the Canterbury Regional Council on the natural, historic and recreational values of the coast to assist it with the preparation of the Regional Coastal Plan. As part of this process, new information gathered about the coastal marine area may require amendments to the Regional Coastal Plan. The Conservancy liaises with the Canterbury Regional Council to ensure the Regional Coastal Plan and coastal permits are not inconsistent with the New Zealand Coastal Policy.

Under the coastal provisions of the RMA, the Minister may declare some activities 'restricted coastal activities' (RCAs). In this situation, the Minister provides a representative on the regional council hearing panel, and the Minister decides on the application. The Minister may also make submissions on other coastal permits to advocate the sustainable management of the coastal marine area.

The Marine Mammals Protection Act 1978 requires the Department to protect and manage marine mammals including whales, dolphins, seals and sea lions.

The Marine Mammals Protection Regulations 1992 regulate human contact and behaviour with marine mammals by commercial operators and other persons to prevent harmful effects. The Minister of Conservation consents to establishing marine reserves under the Marine Reserves Act 1971, with the concurrence of the Ministers of Fisheries and Transport. The Department is then responsible for their ongoing management. The purpose of the Marine Reserves Act is to preserve marine life, underwater scenery and natural features in their natural state for scientific study.

Section 6(b) of the Conservation Act enables the Department to advocate for the conservation of marine life and their habitats. The Department is also responsible for the protection of native seabirds under the Wildlife Act 1953.

Under the Resource Management Amendment Act 1994, the Minister of the Environment can set regulations that control discharges from vessels and the dumping of waste. These implement the Marine Pollution Convention (MARPOL) and other international conventions dealing with the pollution of the marine environment.

The Department advises the Ministry of Transport Maritime Safety Division and regional councils on how to plan and prepare for dealing with oiled wildlife.

Objectives

- to identify marine ecosystems, assess their significance and process applications for marine reserves
- to protect marine mammals and stimulate public awareness and involvement in their management
- to determine future directions for, and action research related to: Hector's dolphin/upokohue population estimates in the area from Motunau to Timaru (including Banks Peninsula); entanglement monitoring design requirements; and entanglement mitigation devices
- to provide for the use of marine mammal parts, having regard to science and Ngāi Tahu aspirations for special taonga
- to ensure effective planning and response capability for the protection and recovery of marine wildlife from the effects of marine pollution

Implementation

The Conservancy will:

1. Survey and monitor priority areas of the coastal environment including baseline surveys of a range of marine habitats. Criteria for determining survey priorities include:
 - the presence of a major potential marine development
 - areas of high marine diversity
 - representative areas

- areas of interest for possible marine reserve status
(see 5.5.4 Survey and Monitoring)
2. Maintain a GIS database of marine resource information for use by the Department and other interested parties.
 3. Share information (such as text and map information) with regional council and others to assist with recognising and providing for significant marine ecosystems and their species, for inclusion in such as regional plans.
 4. Consult with Papatipu Rūnanga, MFish, fishing organisations, the local community and interest groups during the development of marine reserves, regional coastal plans, district plans, fishery legislation and other statutory planning documents. Immediate areas of interest include:
 - seeking improvements to water quality
 - ensuring marine farming plans are consistent with the need to protect natural and amenity values
 - advocating for the sustainable use of marine fisheries by maintaining liaison with associated taskforces and committees
 - advocating fishing methods that will avoid, remedy or mitigate adverse effects on marine mammals and wildlife where by-catch data shows significant incidental catch
 5. Provide procedural and policy advice to other groups or organisations investigating or promoting marine reserves.
 6. Undertake education and advocacy to explain the importance and need for the application of nature conservation principles and protection in the marine environment.
 7. Process applications or apply to establish marine reserves in accordance with the Marine Reserves Act 1971, taking regard of the following criteria:
 - distinctiveness of the area
 - representativeness of the area
 - beauty of the area
 - uniqueness of the area; including rarity and distributional limits
 - appropriateness of size and shape to ensure the purpose of the proposed marine reserve is protected in the long-term
 - the views of Papatipu Rūnanga and Te Rūnanga o Ngāi Tahu
 - public interest
 - the views of fishing interests
 8. Involve the public in marine reserve management as honorary rangers or as members of marine reserve advisory committees. Persons considered would be from:
 - Papatipu Rūnanga
 - local recreational groups
 - conservation groups
 - interested individuals
 9. Advocate protection of marine mammals and marine mammal habitat through input to the Regional Coastal Plan and MFish fisheries assessment working groups.
 10. Support taiāpure as a marine ecosystem management tool for the purpose of achieving integrated conservation management.
 11. Continue to effectively manage the Banks Peninsula Marine Mammal Sanctuary for Hector's dolphin conservation by undertaking: dolphin population trend counts, dolphin population research programmes, and monitoring compliance with sanctuary regulations to promote the protection of Hector's dolphin.
 12. Continue to administer marine mammal-watching permits and monitoring of existing operators as required. Permits will be considered, subject to conditions, using criteria specified in the Marine Mammal Protection Regulations 1992 (5.5.6 Environmental Protection applies).
 13. Maintain a local database and contribute to the national database of incidents involving marine mammals.
 14. Maintain the support and development of working relationships with volunteer groups (e.g. Marine Watch) assisting with marine mammal protection and management.
 15. Maintain and update the Conservancy contingency plan to ensure rapid response to all marine mammal incidents.
 16. Continue to promote general public awareness and involvement in marine mammal protection.
 17. Develop procedures for the distribution of marine mammal parts and specimens to Ngāi Tahu and research institutions (see 5.4.5 Traditional Māori Uses).
 18. Maintain liaison with and provide advice to the Canterbury Regional Council and Maritime Safety Authority to allow the development of effective oil spill contingency planning.
 19. Maintain liaison with community groups and provide staff resources where required to facilitate prompt treatment of oiled wildlife.

Priorities

Primary

- processing marine reserve applications prepared by external organisations
- managing marine mammal-watching permitting requirements
- managing marine mammal rescue needs
- ensuring oil spill contingency planning is in place
- managing the Banks Peninsula Marine Mammal Sanctuary

Secondary

- gathering survey data about the marine environment
- applying for marine reserves in Canterbury

Other lower-level priorities include advocating for fisheries conservation measures in general.

Priorities Sites and Actions

The priority sites and actions were selected on a qualitative assessment of their role in marine conservation. Without formal assessment it is possible to recognise that the Gore Bay and Port Robinson area, and Motunau Island and adjacent area need surveying.

Less Achievable Tasks

Tasks that may not be undertaken or completed include:

- coastal surveys
- applying for marine reserves

Marine work has a lower priority than tenure review, which is the primary protected natural area priority for the Conservancy.

Table 21: Key Marine Ecosystems Priorities

Theme	Issue	Method	Results Sought	Place
Inshore waters Hector's dolphin/upokohue protection	Conserving dolphin populations from non-sustainable impacts of set-netting	1. Marine mammal sanctuary 2. Public input	Dolphin population conserved and management has a broad base of support	Banks Peninsula
Protection of areas of marine ecosystems that meet legislative requirements	Establishing marine reserves in Canterbury	1. Establishment of appropriate marine reserves 2. Public input	Appropriate marine reserves established with management committees	Lowry, Banks Peninsula, Plains
Oil spill planning and response	Avoidance and treatment of oiled wildlife	1. CRC/MSA liaison 2. Training 3. Treatment of oiled wildlife	Minimised oil spill effects on wildlife	Lowry, Banks Peninsula, Plains
Marine mammal rescue	Effective response to strandings	1. Volunteer group assistance 2. Contingency plan	Minimised marine mammal fatalities	Lowry, Banks Peninsula, Plains

5.2.6 Indigenous Species

- protecting indigenous species of plants, invertebrates, reptiles, birds, fish, marine mammals and bats

Current Situation

Canterbury has 107 known species requiring priority management, which is 27 per cent of the 403 species listed in a recent Department inventory of species (Molloy, Davis and Tisdall 1994). Extinction threatens 84 of these species, of which 44 are plants and 40 are animals.

Apart from birds and marine mammals, and to some extent plants, the other major species groups such as invertebrates and reptiles have had very little work carried out on them. This is due, in part, to their lower public appeal as well as to the little information available on all aspects of the species.

Freshwater Fish

A diverse range of endemic native and introduced freshwater fish, including the endangered Canterbury mudfish/kōwaro, live in Canterbury. Canterbury waters are also important for the high quality trout and salmon fisheries they support. Before European settlement, freshwater habitats in Canterbury provided an abundance of food for Māori and were of great importance for mahinga kai.

Agricultural developments and demands for water have modified and degraded freshwater fish habitats in Canterbury. As a consequence, freshwater fisheries (both native and introduced) have declined. The challenge now is to ensure that further degradation does not take place and that critical habitats can be restored or enhanced (see also 5.2.4 Freshwater Ecosystems).

There are 20 species of indigenous freshwater fish in Canterbury, most of which are diadromous (migrate between the sea and rivers). The Canterbury mudfish is endemic to Canterbury and is the most threatened of the region's fish fauna. Its few remaining habitats are a high priority for protection.

Canterbury's large braided river systems provide an important range of habitats for native fish. For example, their lower reaches support inanga populations and provide inanga spawning habitats, which in turn sustain the popular whitebait fisheries.

Other species characteristic of braided rivers are blue-gilled bully and torrentfish/piripiripōhatu that inhabit areas of white water. The alpine tributaries of the braided river systems are habitats for the alpine and long-jawed galaxids. A lowland freshwater fish habitat of note is the highly productive Te Waihora/Lake Ellesmere system. This is of special significance to Ngāi Tahu and supports a diverse range of native and introduced fish fauna. It is also New Zealand's largest commercial short-finned eel fishery. Horseshoe Lagoon (near the Ōpihi River) sustains Canterbury's most significant and possibly only population of giant kōkopu/taiwaru. Lake Marion (in the Lake Sumner Conservation Park) is Canterbury's only faunistic reserve (designated under the Freshwater Fisheries Regulations, section 48A Conservation Act) recognising the intrinsic values of its unmodified freshwater community by protecting its aquatic life.

Canterbury waters are well known, both nationally and internationally, for high quality river and lake sports fisheries for brown and rainbow trout and quinnat salmon. Of note is the presence of Mackinaw (lake trout) in Lake Pearson, the only wild population of these fish in New Zealand. The only noxious fish found in Canterbury is rudd. It is found in several rivers and ponds on the plains.

Birds

A diverse range of bird species is represented in Canterbury, resulting from the region's wide range of major habitat types. Habitats include alpine zones, beech forest associations, high country lake systems, braided river systems, the Te Waihora/Lake Ellesmere brackish lagoon complex, major estuaries, and various marine and coastal ecosystems.

Bird conservation programmes have historically concentrated on single species management. This is a consequence of single species populations being on the verge of extinction and needing urgent management to arrest their decline. As resources have been limited, only the most threatened species were attended to.

A new concept of habitat management has been adopted by the Department, called 'mainland island restoration programmes'. This Conservancy has instigated one of these in the upper catchment of the Hurunui. This mainland island is looking at enhancing an association of beech-forest birds and plant species. These include what is thought to be the only population of orange-fronted parakeets/kākārikiwhero in New Zealand, the largest population of yellow-head/mohua in Canterbury, and other forest species such as kākā, great-spotted kiwi/roa and robins.

In Canterbury two bird species, black stilt/kaki and orange-fronted parakeet, are classified as Category A, the highest priority for threatened species requiring conservation action (Molloy, Davis and Tisdall 1994). Both species require intensive management. The black stilt is the subject of intensive breeding manipulation

and massive habitat restoration programmes (see 4.10.3 Project River Recovery).

Currently, bird-related work is being directed toward establishing the status of various species' populations and the importance of the various habitats within the Conservancy. Much of the work on bird species and their habitats is connected with other areas of responsibility such as habitat restoration, pest or wild animal control, and habitat acquisition and maintenance.

Occasionally, species such as kea conflict with farming and these situations require resolution.

Invertebrates

This group, more than any other, has had little attention. All current knowledge has been accumulated by agencies outside of the Department. The Department must now make an effort to identify management needs and programmes within this group.

The status of most species within this group is not known. Some research and survey work has occurred in Banks Peninsula habitats and for bluff weta and the robust grasshopper.

Reptiles

There are about ten reptile species in Canterbury, however the taxonomic status of some forms is uncertain. Apart from incidental inclusions in some survey reports, no work has been carried out on any of these species.

Bats

Only the long-tailed bat is present in Canterbury. Some work has been carried out to establish the species' distribution and status, and to identify threats to the species.

Amphibians

No native amphibian fauna are found in Canterbury.

Marine Mammals

The sea around Banks Peninsula has been identified as one of the most important habitats for Hector's dolphin/upokohue. Management activities have been directed towards the marine mammal sanctuary established for this species. These activities include research, monitoring and advocacy. There are occasional single whale strandings and seal incidents. (see also 5.2.5 Marine Ecosystems)

Plants

Canterbury's natural ecosystems have been greatly modified by human activities, particularly burning and other land clearance methods. Recovery of the original communities has been difficult or impossible under these circumstances. Today, only tiny remnants of the original native communities (kanuka or swamp forest) can be found on the Canterbury plains. Inland basin areas that were once forested now support developed pasture, scrub or tussock grassland. Coastal communities have been reduced to tiny forest remnants or areas of regenerating scrub. Native sandbinder communities are virtually restricted to Kaitorete Spit. Freshwater lakes and rivers have largely lost riparian vegetation; and high country forest and alpine zones have suffered degradation, nutrient enrichment, and species loss due to introduced mammals and plants.

Seven plant species are now locally extinct while three more are nationally extinct.

Individual plant species recovery programmes are being developed for the highest priority at risk species and populations and the goals of these plans are to reinstate self-sustaining wild populations. As well as protecting habitat, these programmes look at competition and damage caused by browsing and grazing animals. The Department's nursery at Motukarara plays a key role in holding seeds, maintaining provenances in collection and providing known genetically sourced plants for revegetation and restoration programmes.

Species Ranking

The Department of Conservation has prepared a ranking system (Molloy, Davis and Tisdall 1994) to identify priority threatened species for management. The Department developed the system with the assistance of the former Department of Scientific and Industrial Research and the Royal Forest and Bird Protection Society of New Zealand. It has 17 criteria, 14 of which collectively build up a picture of the likelihood of extinction while 3 criteria assess taxonomic distinctiveness and human values.

Species are grouped into one of three categories according to their score:

Category A: highest priority threatened species

Category B: second priority threatened species

Category C: third priority threatened species

This national system will provide the basis for assessing management priorities in the Conservancy. For a list of threatened species in Canterbury see Appendix 2.

An IUCN international ranking system (Wilson and Given 1989) is also applied in New Zealand, though it is less used by the Department than the above system. The categories used are E (endangered), V (vulnerable), R (rare), I (indeterminate), K (insufficiently known) and L (local – a New Zealand category for plants potentially threatened). The categories E, V and R are loosely comparable to the A, B and C categories above. Both rankings have been given, where known, for species in the CMS Volume 2, Schedule 2, schedules.

Species Recovery Plans

Threatened species recovery plans form the basis of the Department's management for particular species. Recovery is defined as 'the process by which the decline of a species is arrested or reversed so that its long-term survival in the wild is, as far as practicable, ensured.' The goal of this process is the maintenance of species in their natural habitats with minimal intervention.

Recovery plans assist the management of threatened species. They:

- identify and prioritise the research and management actions required
- promote public involvement and support
- promote departmental staff involvement and support
- improve prospects for continuous funding

Not all species have individual recovery plans. Where appropriate, species are dealt with in groups. The Biodiversity Recovery Unit in the Department's Head Office co-ordinates requirements for recovery plans. A 'Recovery Group' is formed especially to prepare and implement each recovery plan. These involve Te Rūnanga o Ngāi Tahu, individuals with specific expertise, and non-governmental agencies.

Current Programmes

Major indigenous species management programmes are:

- black stilt/kākī management in the Mackenzie Basin (see also references to Project River Recovery in 5.2.4 Freshwater Ecosystems)
- yellowhead/mohua and orange-fronted parakeet research in the Hurunui catchment (see also references to Hurunui Mainland Island Habitat in 5.2.3 Land Ecosystems)
- Hector's dolphin/upokohue protection and monitoring in the Banks Peninsula Marine Mammal Sanctuary (see also 5.2.5 Marine Ecosystems)
- Canterbury mudfish/kōwaro conservation in South Canterbury
- kea management in the high country

The Conservancy also undertakes other programmes requiring less resources, for example:

- invertebrate species including robust grasshopper, Banks Peninsula tree weta, and buff weta at Mount Somers
- bird species (great-spotted kiwi/roroa, southern crested grebe/kāmana and blue duck/kōwhiowhio)
- plant species: *Carex inopinata*, *Helichrysum dimorphum* and *Muehlenbeckia astonii*.

Current Limitations

Important species where little work is currently undertaken include:

- Banks Peninsula speargrass weevil and *Coxella* weevil
- white-flipped blue penguin
- *Australopyrum calcis*, subsp. *optatum* and *Meliccytus* 'Egmont'.

Statutory Framework

Section 6 of the Conservation Act 1987 enables the Department to manage species. The Department also has this responsibility under the Wildlife Act 1953, Marine Mammals Protection Act 1978, Reserves Act 1977 and the National Parks Act 1980.

Specific provision for species planning under s41(1)(e) of the Wildlife Act 1953 gives the Minister of Conservation the authority to prepare and issue plans and publications for the advancement, conservation and management of wildlife.

The permitting of taking plant and animal samples and specimens for non-commercial research, and bioprospecting is addressed in section 5.5.5 (Research).

Objectives

- To restore species in imminent danger of extinction to population levels from which they can sustain themselves and increase.
- To systematically survey Category A and B species; assess their habitat requirements and threats, and implement management to sustain and enhance their populations.
- To encourage and facilitate community support and involvement in species protection projects.
- To advocate for Resource Management Act methods that recognise and provide for the protection of significant habitats of threatened indigenous fauna and that implement methods that avoid, remedy, or mitigate the adverse effects on such habitats and fauna.

Implementation

The Conservancy will:

1. Continue to prioritise species management by using the national priority ranking system (Molloy, Davis and Tisdall 1994) and local assessments of conservation needs. Appendix 2 summarises management information on all priority species in Canterbury.

Rankings are developed from a wide range of criteria including taxonomic considerations, range considerations, threats and levels of existing protection. This system provides an initial assessment of priorities that are then refined according to the local situation. This has the advantage over previously developed systems in that it assesses all species, plant and animals together using the same criteria.

2. Undertake actions required on approved recovery plans for black stilt/kaki, yellowhead/mohua, kiwi and yellow-eyed penguin/hoiho.
3. Complete strategies to identify research, survey, management and advocacy needs for all the less understood groups of species of threatened plants, threatened bird, invertebrate and reptile species (see 6.1 Conservation Management Plans and Functional Strategies). These strategies will assist in the implementation and achievement of this CMS.
4. Initiate threatened species recovery plans based on their threatened category in Molloy, Davis and Tisdall (1994), under the following criteria:
 - Head Office directed priorities
 - species recovery complexity
 - cost
 - benefits of recovery action on individual species
 - likelihood of extinction
 - taxonomic distinctiveness
 - human values
 - species status
 - threats facing the species
 - vulnerability of the species

Recovery plans will be reviewed regularly, especially where significant information comes to hand.

5. Move from single-species management towards ecosystem-based management, as appropriate. For example, Project River Recovery in the Mackenzie Basin aims to restore the natural processes of braided rivers to the point where the riverbeds can sustain populations of currently threatened and endangered species.
6. Select management techniques that best use available resources with the objective of creating self-sustaining species populations, including:
 - Research: Applying scientific methods to understand species habitat, and predator issues to resolve species management needs and problems.

- Habitat Manipulation: Using habitat manipulation to alter species habitat to provide environmental conditions more favourable for species.
- Pest and Weed Control: Eradicating, containing, or controlling (ongoing) to reduce pest and weed densities until their threats to species are reduced or mitigated.
- Captive Management: Undertaking captive management of species. This can include:
 - providing a safe population when the wild population is at threat
 - developing techniques for holding and raising species, e.g. using analogue species
 - producing individuals to release back in the wild
- *In situ* Management: Undertaking on-site management work to survey, monitor, protect and enhance species. This may involve direct manipulation such as cross-fostering.
- Interpretation: Using education, media and interpretation to raise understanding of species issues.
- Advocacy: Liaising with landholders, regional and district councils and other relevant authorities to enhance the protection of species.
- Translocation: Moving sub-populations of species to suitable safe habitats.
- Island Restoration: Enhancing an island habitat by removing predators and weeds, and translocating sub-populations of species to that island, e.g. Motunau Island, Hurunui Mainland Island Habitat and Quail Island.

When further assessing management techniques, the Conservancy will take the following into account:

- management objectives
 - past management
 - feasibility of population enhancement
 - ability to control plant and animal pests
 - surrounding land management
 - costs and benefits of management options
 - land status, threats, management issues and priorities of Schedule 2 in Volume 2 of this CMS
7. Undertake surveys to establish the status of species populations and their habitats. Priorities for these surveys will be higher for:
 - species categorised as A or B as nationally directed
 - species where basic survey knowledge is needed before any other management actions can be considered
 - species currently thought to be extinct but which may exist if potentially suitable habitat remains (see 5.5.4 Survey and Monitoring)
 8. Protect and enhance habitats important to individual species or for a range of species through reservation, covenants, advocacy and other appropriate mechanisms (see 5.2.3 Land Ecosystems).
 9. Control threats to species populations and their habitats through appropriate input into other relevant responsibility areas covered by this document: such as 5.2.8 (Animal Pests and Wild Animals), 5.2.9 (Plant Pests and Exotic Plants), 5.3.4 (Visitor Impacts and Safety) for dog control and 5.2.10 (Fire).
 10. Encourage sponsorship to fund species management and recovery programmes to supplement Crown funding (see section 5.1.4 Communication and Liaison).
 11. Develop strong advocacy programmes to increase the awareness, management and habitat needs of poorly understood species groups; for example, invertebrates and plants.
 12. Provide input on significant species habitat protection through water and land use plans prepared under the Resource Management Act to avoid adverse effects on significant wildlife habitat and threatened species populations.
 13. Develop greater public participation in species management and habitat enhancement.
 14. Ensure effective monitoring programmes are put into place for all Category A and B species and their habitats where appropriate.

Priorities

Primary

The Department will undertake necessary actions to secure the conservation of Category A and B species, in accordance with national priorities. These actions will include predator control, fencing and habitat protection.

Secondary

Promotion of indigenous species conservation work by outside organisations and individuals.

Priority Sites and Species

Appendix 2 lists the species, locations and management actions where significant effort is intended over the period of this strategy. Notable actions include:

- black stilt conservation efforts in the Mackenzie Basin, associated with Project River Recovery
- great-spotted kiwi monitoring in the Arthur's Pass and Lewis Pass areas
- Canterbury mudfish habitat protection in South Canterbury
- Hector's dolphin conservation around Banks Peninsula
- pingao conservation on Kaitorete Spit
- yellowhead/mohua and orange-fronted parakeet in the Hurunui catchment

Less Achievable Tasks

Tasks that may not be undertaken or completed include:

- undertaking invertebrate and reptile research and management of other than A and B priority species currently known or identified in the future.
- protecting white-flipped and blue penguins around Banks Peninsula
- protecting indigenous habitats of birds, plants and invertebrates on private land with the support of land holders
- protecting Category C species

Indigenous species priorities are tabled in Appendix 2. (This replaces the standard key priorities table)

See also: 5.2.3 Land Ecosystems
5.2.4 Freshwater Ecosystems
5.2.5 Marine Ecosystems
5.5.4 Survey and Monitoring
5.5.5 Research

5.2.7 Historic Resources

- managing historic places on land managed by the Conservancy

Current Situation

Introduction

Historic places can broadly be defined as sites bearing identifiable evidence of human activity. They include land, archaeological sites, buildings, structures and any combination of land, buildings or structures, as well as wāhi tapu, and wāhi tapu areas that form part of the historic and cultural heritage of New Zealand. A site with evidence of human activity more than 30 years ago on land managed by the Department may be recorded as an historic place if it is determined that the place is of historic significance.

Historic resources are not renewable and once damaged or destroyed cannot be replaced. Management should therefore address first the physical protection of historic places and where this is no longer possible, should protect the information by appropriate recording and archiving.

Due to activity by Māori and Pākehā peoples over many years, the Conservancy has a wide variety of historic places that represent the exploration, occupation, development and growth, transport and defence of the area. Examples of these historic places are well dispersed over the land managed by the Department.

Historic places on land managed by the Department are protected, but still require management from the threat of natural processes, inappropriate public use, deferred maintenance and other uses that can have adverse results.

The Department produced a national *Historic Heritage Strategy* in 1995 with which the Conservancy actions must be consistent.

Archaeology

The archaeological evidence of Māori settlement in Canterbury begins early in the millennium. Population increased rapidly to reach a peak in the fourteenth and fifteenth century. Moa hunting and diversified hunting and gathering appear to be the major food sources utilised, according to the archaeological records. Settlements were established in the coastal zone, often near river and stream mouths. The material culture of this region was technically and artistically distinct with the rock drawings of North Canterbury, South Canterbury and North Otago being notable.

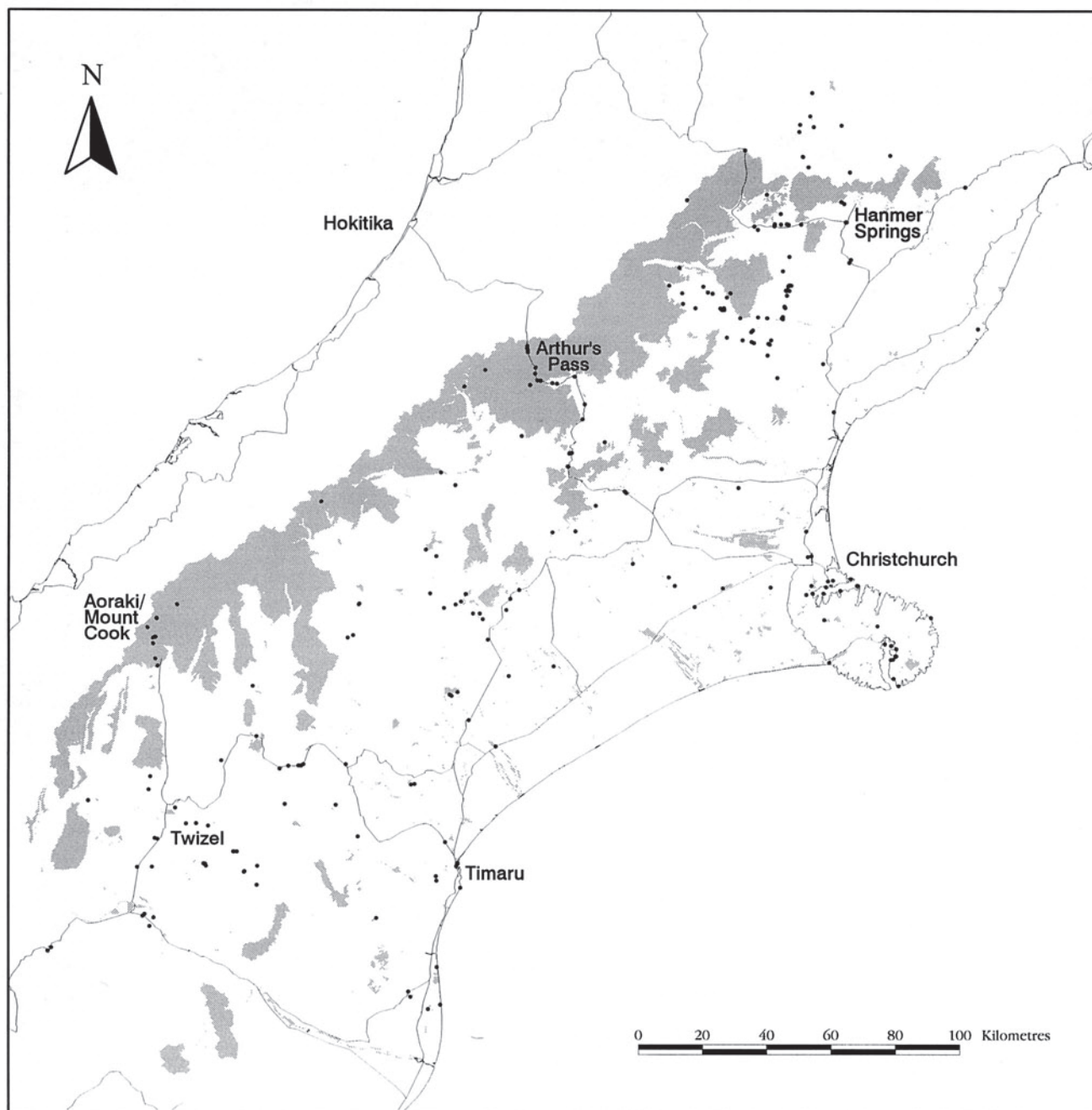
By the sixteenth century, substantial deforestation and reduction in species availability had occurred, and the population may have declined. Subsequent settlement reflects a greater reliance on marine fishing and shell fishing near Banks Peninsula. Greater trade networks developed with the increased scale of pounamu (greenstone) working in the later eighteenth century. The emergence of defended pā appears to be consistent with increasing focus of settlement on Banks Peninsula, Taumutu, Woodend-Kairaki areas.

Some well-known archaeological sites are found on land managed by the Department in Canterbury. These include (in whole or part): Pā Island; the fortifications at Ripapa Island, and on Banks Peninsula; the ditch and bank enclosure at Waipara; river mouth sites at Rakaia, Waiau and Motunau; rock art sites at Raincliff, Castle Hill and Weka Pass; sections of coastal dunelands with oven and midden sites on Kaitorete Spit; middens and ovens on Motunau Island; and the early European sites of the first Hermitage and the first Ball Hut in Aoraki/Mount Cook National Park.

The archaeology of Canterbury is of particular significance to New Zealand archaeology generally because of its relevance to the themes of subsistence economics (mainly moa hunting, fishing, shellfish collecting, cabbage tree/ti rakau use and horticulture), environmental change (such as deforestation, coastal geomorphology, species extinction and range reductions) and rock art (Challis, 1995).

However, the archaeological sites on land managed by the Department are not generally representative of the total population of archaeological sites (see Map 19). Sites with midden and oven evidence, although well represented quantitatively, are concentrated in coastal areas (particularly Kaitorete Spit). Most other types of site are rare on land managed by the Department. In particular, whaling sites, pits thought to be earth ovens, and pits on coastal ridges are poorly represented. Stone source sites and horticultural sites may not be represented at all. A preliminary assessment suggests that only 16 per cent of recorded archaeological sites are on land managed for historic protection purposes (Challis, *ibid*).

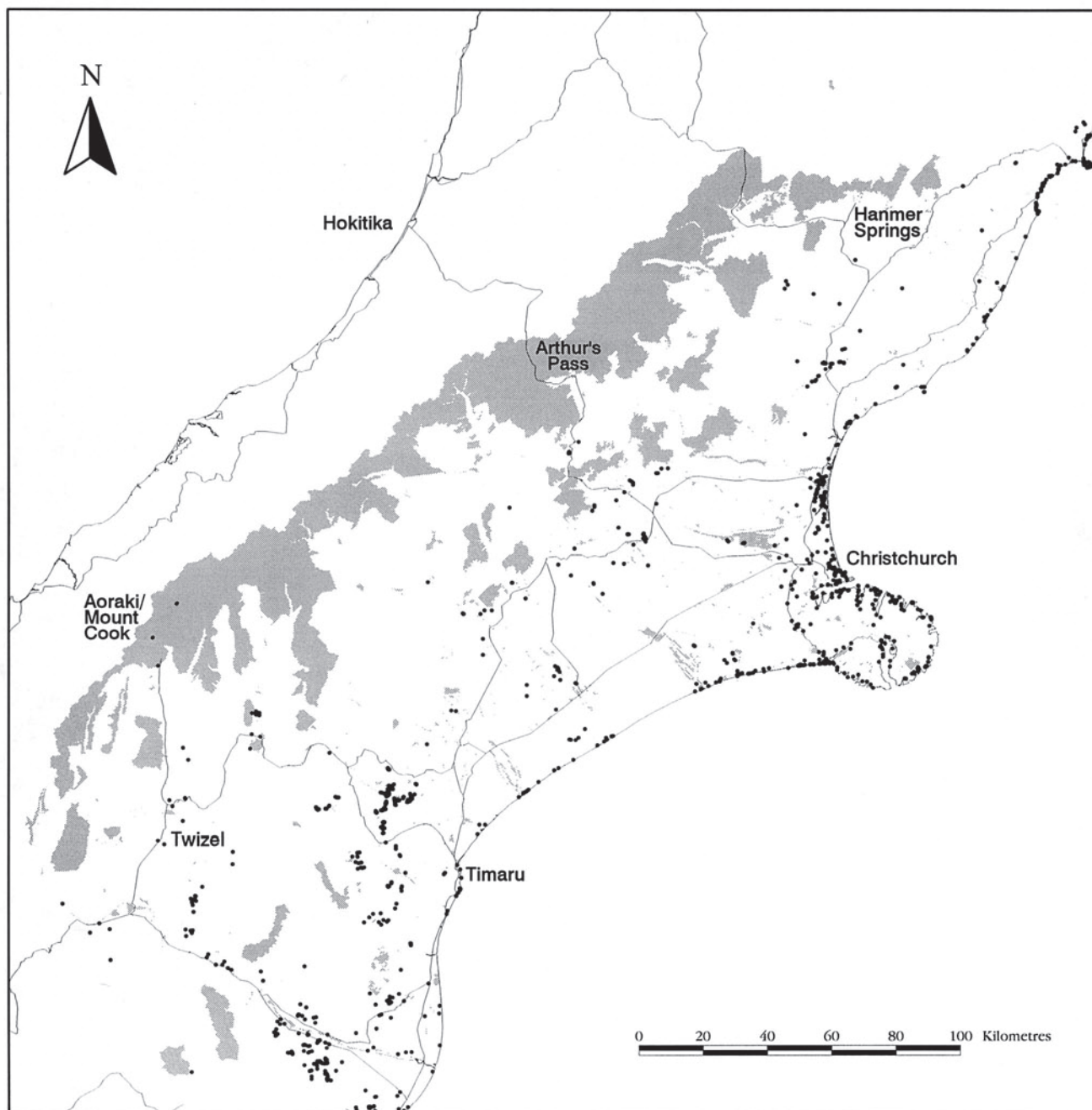
Map 18 Historic Places



- Historic places
- State highway
- Land managed by the Department

Source: Canterbury Conservancy
Historic data base

Map 19 Archaeological Sites



- Archaeological sites
- State highway
- Land managed by the Department

Source: Head Office
Archaeological data base

Recent History

The settlement of Europeans in Canterbury has left a range of historic places varying from whaling and agricultural settlement remains, saw pits, lime kilns, mining sites, coach road remains, signal stations and defence installations. Appendix 3 lists and Map 18 shows the historic sites on land managed by the Department.

Management

Traditionally, historic resources have been managed without comprehensive information on their values or threats they face at any place. Given the extent and scale of some of the historic values, and resource constraints faced by the Conservancy it is necessary to focus management where the historic values under threat are highest. Historic management projects that address threatened historic values include:

- stabilisation of Fort Jervois at Ripapa Island
- rock drawing management at Raincliff and Weka Pass Historic Reserves
- an archaeological synthesis of Māori settlement of Canterbury
- Acheron Accommodation House maintenance
- preservation of the Staveley lime kilns

Current Less Achievable Tasks

Some important areas where more research is needed include:

- a detailed survey of Māori historic sites on land managed by the Department
- culturally appropriate ways to manage Māori sites
- historic buildings on Quail Island and Adderley Head
- Godley Head World War II installations
- stabilising or restoring the Staveley Lime Kilns
- Tenure review surveys

Themes

To clarify the management of historic places the Conservancy has adopted the following main historical themes that relate to actively managed historic places:

- Māori occupation: resource use, fortifications, rock shelters
- exploration
- buildings, settlement and community: education, immigration, power generation
- transport and communications
- defence
- mountain recreation and tourism
- rural industry: farming, forestry
- extractive industry
- astronomical investigation (Transit of Venus observation site)

Liaison

The Conservancy liaises closely with the New Zealand Historic Places Trust and Ngāi Tahu. The New Zealand Historic Places Trust has a regional officer based in Christchurch and branch committees in Christchurch, Ashburton, Timaru and Oamaru. The sharing of information and close liaison assists historic management. The New Zealand Archaeological Association, local museums, historical societies and interest groups are a valuable source for research, interaction and project assistance.

Statutory Framework

The Department has a role to protect historic places on land it manages under Section 6(a) of the Conservation Act 1987, Section 3(a)(v) of the Reserves Act 1977 and Section 4(2)(c) of the National Parks Act 1980. The Department has adopted a policy of assessing all sites dating back more than 30 years for their historic value.

The New Zealand Historic Places Trust has a broader role under the Historic Places Act 1993 to 'promote the identification, protection, preservation and conservation of the historical and cultural heritage of New Zealand'. The Conservancy, under New Zealand Historic Places Trust rules, has a member appointed to the following New Zealand Historic Places Trust Branch committees: Canterbury, Ashburton District and South Canterbury.

The New Zealand Historic Places Trust maintains a register of historic places, and can register places according to their historic or cultural value.

All archaeological sites (pre-1900) on land managed by the Department are protected and require various consents to be modified. In the case of Māori sites, the permission of the appropriate rūnanga must be given. Artefacts that may exist in an archaeological site are protected under the Antiquities Act 1975. The Antiquities Act determines where an artefact may be held and the movement of such artefacts. The Māori Land Court can have a role to decide on actual or traditional owners.

Objectives

- To systematically identify and locate historic places and their values and threats on land managed by the Conservancy
- To prioritise historic management work by actively managing a representative range of Canterbury's historic places that are culturally diverse and/or are of high historic significance.
- To consult with Ngāi Tahu over appropriate tikanga/management of historic sites/wāhi tapu.
- To collaborate with and support the New Zealand Historic Places Trust, museums, historical societies, universities and other agencies to promote, manage, identify and protect historic places on land managed by the Department.

Implementation

The Conservancy will:

1. Implement the *Historic Resources Strategy: Canterbury Conservancy* (1998). The following implementation statements are derived from that strategy.

The strategy must be consistent with, and assist in the implementation and achievement of this CMS.

2. Prioritise, where necessary, historic places management over natural resources or recreational management, depending on the value of the historic place and the degree of threat it faces.
3. Maintain its historic strategy, which sets priorities for historic place management and establishes and identifies places that will be actively managed. The following Historic Places Act criteria will be used as a basis for determining priorities:
 - New Zealand History: The extent to which the place reflects important or representative aspects of New Zealand history.
 - Association: The association of the place with events, persons or ideas of importance in New Zealand history.
 - Potential: The potential of the place to provide knowledge of New Zealand history.
 - Tāngata Whenua: The importance of the place to tāngata whenua.
 - Community Association: The community association with, or public esteem for, the place.
 - Public Education: The potential of the place for public education.
 - Technical Accomplishment: The technical accomplishment or value, or design of the place.
 - Symbolic/Commemorative Value.
 - Early Settlement: The importance of identifying historic places known to date from early periods of New Zealand settlement.
 - Rarity: The importance of identifying rare types of historic places.
 - Historic/Cultural: The extent to which the place forms part of a wider historical and cultural landscape.
 - Māori Interest: Such additional criteria for registration of wāhi tapu, wāhi tapu areas, historic places and historic areas of Māori interest as may be prescribed in regulations made under the Historic Places Act.
 - Other Relevant Criteria.
4. Select the management method that best uses the resources available; with a view to minimising the long-term management costs. The following principles, derived from the *ICOMOS New Zealand Charter* 1993 will be used in assessing the degree of intervention required for site conservation:
 - Non Intervention: In some circumstances, assessment may show that any intervention is undesirable. In particular, undisturbed constancy of spiritual association may be more important than the physical aspects of some place of indigenous heritage value.
 - Maintenance: A place of cultural heritage value should be maintained regularly and according to a plan, except in circumstances where it is appropriate for places to remain without intervention.
 - Stabilisation: Places of cultural heritage value should be protected from processes of decay, except where decay is appropriate to their value.

- Restoration: Restoration should be based on respect for existing material and on the logical interpretation of all available evidence; so that the place is consistent with its earlier form and meaning.
 - Relocation: Relocation can be a legitimate part of the conservation process where assessment shows that:
 - the site is not of associated value (an exceptional circumstance)
 - relocation is the only means of saving the structure
 - relocation provides continuity of cultural heritage value
 - Adaptation: The conservation of a place of cultural heritage value is usually assisted by it serving a socially, culturally or economically useful purpose.
 - Interpretation: Interpretation of a place may be appropriate if enhancement of public understanding is required. Relevant tikanga or accepted custom should be complied with.
 - Reconstruction: Reconstruction is distinguished from restoration by the introduction of additional materials where loss has occurred.
- When further assessing the intervention principle, the following need to be taken account of:
- views of Ngāi Tahu, where relevant
 - views of the New Zealand Historic Places Trust
 - feasibility of intervention strategy
 - history of management
 - costs and benefits of the management option
5. Actively manage historic places through the following methods:
 - defining the cultural heritage value of the place, which requires prior researching of any documentary and oral history, a detailed examination of the place, and the recording of its physical condition
 - community consultation, continuing throughout a project as appropriate
 - the preparation of a conservation plan which meets the requirements of the *ICOMOS New Zealand Charter 1993*
 - the implementation of planned work including remedial and long-term maintenance
 - the documentation of any research, recording and conservation work, as it proceeds
 6. Prepare New Zealand Historic Places Trust registration proposals as required for historic places.
 7. Determine the level of management for an individual historic place by following any existing protected status or where this does not exist:
 - Evaluate by an initial significance assessment. This information will be recorded in a conservation plan.
 - Where no initial significance assessment exists, any known historic place which is over 30 years old on land managed by the Department will be assessed for its historic significance.
 - The decision to conserve a historic place will be made on the basis of a formal assessment of significance and funding availability, using Implementation 3 as a guide.
 8. Record historic places on lands managed by the Department through the progressive maintenance and updating of the Conservancy database. An inventory (called a 'Protection Plan' within the *Historic Heritage Strategy 1995*) will be developed from this information, which will include all known historic places on land managed by the Department.
 9. Prepare a concise but comprehensive history as required for each major land area identified in the *Historic Resources Strategy, Canterbury Conservancy (1998)*. In some cases, the CMS Volume 2, Schedule 2, schedules will suffice.
 10. Prepare an outline for the historic themes relevant to each significant historic place, prior to active management commencing.
 11. Liaise with Ngāi Tahu to recognise their 'silent file' system of recording some sites (see 5.1.2 Treaty Partnership).
 12. Carry out surveys in areas where there are gaps in historic information. Such areas will include:
 - land associated with tenure review
 - land managed by the Department adjacent to the coast
 - Banks Peninsula
 - Lowry Unit
 - Puketeraki Unit
 13. Prepare a conservation plan that meets ICOMOS principles and standards (see Implementation 5), once a decision to actively manage a historic place has been taken.
 14. Schedule remedial and regular maintenance work in Conservancy business plans as required.
 15. Comply with procedures to modify any historic place, including consultation with the appropriate rūnanga, as set by the New Zealand Historic Places Trust.

16. Provide visitor services at historic places at the Department's discretion, where they will not adversely affect the significance or values of the place.
17. Undertake remedial work in response to urgent threats without undertaking the planning process of Implementation 5 where:
 - a historic place of high significance is under dire threat, and
 - Ngāi Tahu (in the case of Māori sites) has been consulted, and
 - the Historic Places Trust (in the case of all historic sites) has been consulted and has given statutory approvals
18. Undertake maintenance of the Acheron Accommodation House in Nelson/Marlborough Conservancy with the assistance of NZHPT Canterbury Branch Committee.
19. Undertake a systematic programme of recording and assessment of archaeological sites in the coastal zone on land managed by the Department. This is due to the significance and concentration of archaeological sites on the coastline.
20. Relocate and/or re-evaluate key recorded/known sites on land managed by the Department.
21. Consider for formal protection by covenant, management agreement or purchase any outstanding sites not on land managed by the Department, having regard to Implementation 3.
22. Ensure all proposed archaeological investigations of Māori pre-history on land managed by the Department has the sanction of the appropriate Ngāi Tahu Papatipu Rūnanga.
23. Ensure all archaeological investigations on lands managed by the Conservancy have the approval of the Department.
24. Investigate and discuss with Ngāi Tahu arrangements for joint management projects or management devolution for appropriate sites.
25. Retain Department of Conservation representation on New Zealand Historic Places Trust branch committees.
26. Share information, skills and experience with New Zealand Historic Places Trust on projects such as South Canterbury rock drawings where preservation can work to mutual advantage, and with the New Zealand Archaeological Society in relation to site recording.
27. Assist universities, museums, historical societies, and individuals with visitor services and research materials for historic places.

Priorities

Primary

All historic places on land managed by the Department are protected. Where sites are threatened, some management intervention may be necessary to stabilise, repair, maintain or relocate the structure.

Criteria in Implementation 3 will provide the basis for the Conservancy's assessment of historic significance, and the decision to actively manage a site.

Other Priorities

- Assessing the values, significance and appropriate management of Māori sites with Ngāi Tahu
- Assessing the significance of historic places as part of tenure review processes

Priority Sites

Recognising that these priority protection sites have yet to be established, sites on which important historic management initiatives have commenced, and which will continue to occupy a significant portion of available resources in the immediate future, are outlined in Table 22.

The priority sites have been selected on a qualitative assessment of the value of the historic places in Canterbury, using the criteria in Implementation 3. This list will form an interim basis for directing historic management effort on land managed by the Department in Canterbury.

Less Achievable Tasks

Tasks which may not be undertaken or completed include:

- detailed archaeological studies of Maori prehistory
- maintenance/stabilisation of all European historic buildings
- preparation of concise and comprehensive histories of all major land units

Table 22: Key Historic Resources Priorities

Theme	Issue	Method	Results Sought	Place
Archaeological Māori rock drawing – occupation	1. Natural processes 2. Stock 3. Human activity	1. Recording 2. Fencing 3. Stabilisation 4. Research	Drawings maintained, sheltered, fenced and conserved	Lowry Pass Historic Reserve
Fort buildings and archaeological site – defence	1. Deferred maintenance 2. Vandalism	1. Signs/Interpretation 2. Vegetation management	Remedial work carried out, improved interpretation	Banks Peninsula (Ripapa Island Historic Reserve)
1874 men's quarantine barracks – development and growth	1. Weather 2. Deferred maintenance 3. Vandalism	1. Restoration	Remedial work carried out and annual maintenance completed thereafter	Banks Peninsula (Quail Island Recreation Reserve)
Lime kilns – development and growth	1. Recreational use 2. Natural processes 3. Deferred maintenance	1. Stabilisation 2. Maintenance plan	Staveley Lime Kilns conserved and maintained	Rangitata (Staveley Conservation Area)
Archaeological Māori rock drawings – occupation	1. Natural processes 2. Human activity 3. Stock	1. Conservation plan 2. Stabilisation 3. Research 4. Interpretation	Shelter fence maintained and drawings conserved	Pareora (Raincliff Historic Reserve)

5.2.8 Animal Pests And Wild Animals

- managing the effects that animal pests have on fulfilling statutory obligations to adjoining landowners and indigenous biodiversity
- controlling and eradicating wild animals where necessary and practicable
- managing recreational hunting areas (RHAs)

Current Situation

Background

Both animal pests and wild animals pose threats to natural values in Canterbury. It is important to differentiate between animal pests and wild animals for statutory purposes. The Department defines an animal pest as any animal that poses an existing or potential threat to indigenous ecosystems processes, habitats or species. Wild animals are defined in the Wild Animal Control Act. However, the basic management principles and control techniques are identical in both. These are:

- prioritising management on the significance of the actual or potential impacts of the pest or wild animal on identified natural values
- controlling on the basis of achievable goals with present resources and technology
- the level of control applied must be the method that is best able to meet the natural values threatened
- areas for control will be managed as discrete management units
- The Department will control wild animals where recreational and commercial hunting is insufficient to maintain natural values

Animal Pests

Various animal pests pose major threats to natural values in Canterbury. Some of the most significant are:

- the impacts rabbits have in dry intermontane basins on the tussock grassland ecosystems, particularly in the Waitaki basin.
- predation on native riverbed birds by rats, mustelids and cats
- the impacts of wallabies on native tussock grasslands and forest remnants in the Pareora area
- predation by mustelids and rats on forest birds, particularly in beech forest ecosystems in the Waimakariri and Hurunui areas
- the impacts of brushtail possums on podocarp hardwood forests on Banks Peninsula
- the impacts of wasps on beech forest ecosystems (including invertebrates, birds and reptiles) and on recreation
- the impacts of thar on the tussock grasslands and shrublands of the central Southern Alps/Kā Tiritiri o te Moana and inland mountain ranges
- predation by cats on wildlife, particularly in areas adjacent to dwellings
- the threat from dogs to ground-dwelling birds, particularly kiwi (see 5.3.4 Visitor Impacts and Safety).

Current pest management in Canterbury is dominated by the need to meet statutory requirements for rabbit and wallaby control. At present these animal pests are under control on lands managed by the Department, enabling natural values to be maintained.

However, predators such as mustelids, rats and wasps are having major impacts on many indigenous ecosystems, birds, invertebrates and reptiles. The Department released a national wasp control plan in 1995.

Important areas where a significant problem either exists or could develop include:

- stoats predating forest bird species such as yellowhead/ mohua and great-spotted kiwi/rorea
- wasps competing for food with birds such as South Island kākā and threatening recreational experiences in northern montane beech forests
- ferrets and cats predating penguins around Banks Peninsula
- hares browsing on mountain grasslands

Some gamebirds (e.g. Canada geese) are considered by some people to be a pest but their management is as a gamebird by the Fish and Game Councils with whom the Department has close liaison (see 5.1.4 Communication and Liaison).

Wild Animals

Various wild animals pose threats to natural values in Canterbury. The most significant are:

- the impacts of deer, thar and chamois on alpine, beech forest and subalpine vegetation
- the impacts of goats on podocarp and hardwood forests on Banks Peninsula

Some wild animals have significant commercial and recreational values; for example, deer for farming, feral meat recovery and recreational hunting.

Issues that require additional management resources include:

- monitoring the trends of deer, chamois, wallaby and thar in alpine grasslands and beech forests
- managing RHAs in accordance with national policy
- gazetting areas for permitting or prohibiting deer species
- authorising safari hunting

Himalayan Thar

The Himalayan Thar Control Plan 1993 implements the Himalayan Thar Management Policy 1991. The plan outlines the management necessary to achieve the sustained control of thar; prescribes intervention levels (which vary between areas) to which thar populations are to be reduced and kept below to avoid unacceptable damage to natural values. The policy recognises that thar cause impacts on alpine ecosystems and that they provide both recreational and commercial hunting opportunities. The plan is due to be reviewed in 1998.

Recreational Hunting Areas (RHAs)

Canterbury has two recreational hunting areas, one overlying Lake Sumner Conservation Park and the other over Mount Thomas and Mount Oxford conservation areas. Both are popular with hunters. These RHAs are an example of the extensive range of hunting opportunities available in Canterbury. The purpose of RHAs is to protect recreational hunting opportunities from commercial exploitation. Pressure from commercial hunting has declined dramatically since it peaked in the 1970s. It no longer poses any significant threat to recreational hunting opportunities in most areas, however it is a threat in the Lake Sumner and Mount Oxford RHAs. This situation is not expected to change over the next five to ten years. National parks, reserves and conservation areas also provide ample scope for hunting opportunities.

Statutory Framework

General

The Department's animal pests and wild animal management work is given general legislative effect through the Conservation Act 1987, the Reserves Act 1977 and the National Parks Act 1980, that all seek to protect natural values.

More specific legislation includes the following:

Wildlife Act 1953

The *Wildlife Act 1953* specifies animals to be subject to the *Wild Animal Control Act*, and also the various controls on bird species, including wildlife causing damage. Section 7C provides for the Minister to authorise the farming of unprotected animals such as ferret.

Biosecurity Act

The Biosecurity Act 1993 is legislation under which the control of animal and plant pests can be undertaken. The Act enables various parties to take a range of measures to ensure animal pests are adequately controlled through preparing national and regional animal pest management strategies. A strategy specifies the actions that must be taken to achieve control of a pest, the management agency responsible for implementing the strategy, how the strategy will be funded, the extent that land occupiers are required to be involved, and specifies enforcement measures to ensure compliance with these requirements. Provisions of the Agricultural Pests Destruction Act 1967 remain in effect during a transitional period.

The Ministry of Agriculture and the Animal Health Board are responsible for pest control for animal health, such as controlling possums for their tuberculosis threat. The Department liaises with them where control for natural values and animal health overlaps, or otherwise occurs on lands managed by the Department.

Wild Animal Control Act

The Wild Animal Control Act 1977 defines wild animals (for example, deer, thar, chamois, goats and pigs) and enables the Department to control wild animals generally and to eradicate wild animals where necessary and practical. The focus of the Act is to 'ensure concerted action against the damaging effects of wild animals on vegetation, soils, waters and wildlife'.

The Wild Animal Control Act also provides for Recreational Hunting Areas (RHAs) under s.27. In these areas, recreational hunting is to be the main form of wild animal control. Under the Act, control plans for RHAs must be revised at intervals of no greater than five years. Section 28 of the Act requires that each recreational hunting area be managed under a wild animal control plan, and that this be a publicly notified process.

A Himalayan thar control plan was approved in 1993. A Department of Conservation national possum control plan and a national feral goat control plan were approved in 1993. A national deer control plan is in preparation.

Safari parks, under section 12B of the Wild Animal Control Act, must be authorised by a permit. A safari park is defined as 'a farm where income is derived from wild animals being hunted on the farm'.

For deer farming the Minister has the powers to gazette areas or places where the farming of all deer or particular species of deer is either permitted or prohibited under section 12A(2) of the Wild Animal Control Act. Deer species not present in the wild in the South Island, such as sika and rusa deer are totally prohibited.

Under section 24 of the Wild Animal Control Act, the Director-General may license operators by permit for Wild Animal Recovery Services (WARS), and determine the maximum number of aircraft to be permitted to operate for any species of wild animal in the Conservancy or area. The Director-General needs to determine the optimum density of wild animals to achieve the purposes of this Act. The relevant criteria in considering whether to amend, suspend, or cancel the permit are given in section 26 (4) of the Act.

Freshwater Fisheries Regulations 1983

These regulations specify fish declared to be noxious fish (see 5.2.4 Freshwater Ecosystems) and available actions to control them.

Objectives

- To identify significant animal pests on land managed by the Department, assess the risks they pose to natural values, and undertake control where it best contributes to indigenous biodiversity and landscape protection.
- To fulfil responsibilities for pest control and maintain good neighbour relationships with all adjoining landholders by co-operatively undertaking boundary pest control responsibilities as specified in regional pest management strategies.
- To foster recreational hunting in Canterbury to protect indigenous plants, reduce wild animal densities, provide recreational satisfaction and reduce management costs.
- To authorise a competitive range of operators for wild animal recovery services to efficiently reduce the adverse effects of wild animals on vegetation, soil, water and wildlife.
- To approve or prohibit deer farming of all or certain species of deer based on the presence of feral deer in the area, the impacts of escaped deer on native flora and fauna and control costs.
- To approve appropriate safari parks where the risk of wild animals escaping can be avoided, remedied or mitigated.

Implementation

The Conservancy will:

1. Prepare and maintain animal pest and wild animal strategies to provide clear priorities for pest and wild animal control and monitoring programmes required for their management. Each document will identify where the species occurs, its impact on natural values, intervention levels, and where and how controls will be implemented. In addition, all will set practical performance levels that are measurable and auditable. All will be in accordance with current national control strategies or guidelines. The strategies will assist in the implementation and achievement of this CMS.
2. Prepare contingency plans on how the Conservancy will react to liberations or escapees. If illegal or accidental introductions occur in environmentally important areas, all practical steps will be taken to remove them. Where possible, the cost of these operations will be recovered from those responsible for the release.

3. Focus pest control where there are indigenous biodiversity and landscape conservation priorities.
4. Undertake control operations when rabbit densities reach or exceed level 3 on the MacLean Scale, and follow-up operations where appropriate. (Follow-up operations may be at less than level 3 of the MacLean Scale.)
5. Meet requirements of national or regional pest management strategies prepared in accordance with the Biosecurity Act (such as a rabbit strategy) where the Crown agrees to be bound by that plan.
6. Identify key areas of land managed by the Department and set priorities for pest and wild animal management in those areas where they are identified as a threat. (5.2.3 Land Ecosystems, Implementation 3 provides the basis for assessing natural value priorities). Priorities for management will then be set on the basis of:
 - the natural significance of the value identified
 - the types and level of threat to each identified value
 - the value of the management gain from the effort directed at the threat to each identified value
7. Select from the following control approaches to best use available resources to minimise long-term management costs:
 - Eradication: the permanent removal of all individuals of a species from a location. There must be:
 - no or a very low, probability of re-invasion from outside sources;
 - effective control methods available which can:
 - target all individuals in the population
 - remove individuals faster than the rate of increase of the species
 - still remove individuals at very low densities
 - certainty that the eradication programme can be completed.
 - Sustained control: ongoing, regular control that reduces animal numbers and maintains them at a lower pre-determined level which protects the values under threat. This can be undertaken by the Department or by sustained harvesting, by recreational and/or commercial hunters.
 - Zero density: total eradication in a particular area and the ongoing control of any animals migrating into that area.
 - No solution: no management solution exists at present for technical reasons or because research is needed.
8. Liaise with individuals and groups, including adjacent landholders, seeking co-operation and assistance to achieve pest and wild animal control objectives and the protection of natural values.
9. Co-ordinate control operations with adjoining landholders or administering authorities where possible, such as the Ministry of Agriculture, the Animal Health Board and regional councils, where animal health and natural value control overlap.
10. Train staff in the safe handling, use and storage of poisons, traps and other control techniques, and comply with all storage and other safety requirements.
11. Advocate for suitable poison application rules in regional plans.
12. Advocate through district and regional plans to raise awareness of threats posed by animal pests and wild animals to indigenous ecosystems.
13. Participate in educational programmes to raise awareness of animal pests and wild animal threats, in particular:
 - the deliberate spread of animal pests
 - the threats animal pests pose to indigenous biodiversity and the need for control techniques
14. Support and encourage research into the following aspects of pest and wild animal control:
 - improving biological control for targeted species including possum, rabbits, stoat and wasps
 - improving control techniques for targeted predators including stoat, rat species and wasps
 - improving the cost-effectiveness of pest and wild animal control
 - improving the effectiveness of recreational hunting
 - assessing recovered carcasses for disease, such as bovine tuberculosis
15. Undertake operational monitoring of all pest control operations, including the following:
 - pre-monitoring of natural condition and animal densities
 - post-operation density performance monitoring to determine project effectiveness
 - various post-operation monitoring of natural values to determine improvements in natural quality
16. Control wild animals such as deer, pig, chamois and thar in most areas by recreational hunters and/or commercial operators, unless monitoring shows this to be ineffective.
17. Continue to assess recreational hunting in RHAs for its effectiveness in adequately protecting the vegetation, soils, water and wildlife of the area.

18. Vary or revise the following wild animal control plans at least every five years or sooner as required, in accordance with the Wild Animal Control Act 1977:
 - Oxford Recreational Hunting Area (Griffiths, 1982)
 - Lake Sumner Recreational Hunting Area (Belton, 1986)
 - Himalayan Thar Control Plan 1993
19. Encourage and allow for recreational hunting by permit only on appropriate land managed by the Conservancy.
20. Determine priority areas for wild animal control and relevant wild animal density thresholds based on their impacts on indigenous vegetation, and the significance of that vegetation.
21. Determine the number of aircraft to be permitted under a WARS licence. This may be for any species of wild animal, for the Conservancy, or any part thereof having regard to:
 - the provisions of the Wild Animal Control Act
 - the requirement to protect native flora and fauna
 - conflict with other legitimate uses of lands managed by the Department
22. Recommend to the Minister to gazette areas where the farming of any or all deer species may be permitted or prohibited based on the following criteria:
 - whether feral deer of the same species are already established in the area
 - whether deer-induced modification of the environment (if the deer escape) is likely to differ from the modification of the environment caused by introduced animals already present
 - whether the presence of that species of deer is likely to cause additional control costs (section 5.5.6 Environmental Protection applies)
23. Recommend to the Minister the authorisation of the farming of unprotected animals, pursuant to the Wildlife Act, where adverse effects can be avoided, remedied or mitigated (5.5.6 Environmental Protection applies).
24. Support Fish and Game Councils in the implementation of the South Island Canada Goose Management Plan by:
 - allowing access to land managed by the Department to control geese when compatible with other natural, historic and recreation values
 - undertaking Canada goose management, if required

Priorities

Primary

The existing ongoing departmental control programmes (e.g. possums) will continue to have the highest priority, along with the requirements of regional pest management strategies.

Secondary

The secondary priority is the protection of indigenous biodiversity and landscapes that fall outside the programmes. Criteria for this are established in section 5.2.3 (Land Ecosystems, Implementation 3).

As part of this priority, the existing RHAs will be reviewed, in accordance with a proposed national deer control plan, to ensure they are an effective and efficient management tool for wild animal control.

Priority Sites and Species

Priority sites have been determined on the following basis:

- meeting the requirements of national priorities under the Department's national possum plan (1993), the national feral goat control plan (1993) and the national wasp control plan (1995)
- meeting the needs of the Himalayan thar control plan (1993)
- reflecting qualitative assessments of key ecosystems and species at risk from animal pests and wild animals in Canterbury
- reflecting the impact the animal pest has on recreational users

All eight of the priorities in Table 23 seek to protect indigenous biodiversity, although it is acknowledged that wasp control is primarily for recreational reasons until new technology is developed. These priorities will form an interim basis for directing major animal pest and wild animal control effort in Canterbury until animal pest and wild animal strategies are completed. If an ecosystem protection strategy is prepared (see 5.2.3 Land Ecosystems) this may also affect priorities.

Less Achievable Tasks

Tasks that may not be undertaken or completed include:

- eradicating any of the currently acclimatised species
- possum control for the purpose of protecting beech forest ecosystems
- wide-scale wasp control for the protection of beech forests, native invertebrates, birds and recreationists
- chamois control in North Canterbury for the protection of alpine and subalpine vegetation
- stoat, other mustelid, cat or rat control for the protection of native invertebrates and birds

Table 23: Key Animal Pests and Wild Animals Priorities

Theme	Issue	Methods	Result Sought	Place
Podocarp forest – possums	Palatable plant species, some of which are rare or at their distributional limit	1. Chemical 2. Trapping	Possum densities reduced to levels at which defined natural values are not compromised	Banks Peninsula
Podocarp forest, shrubland and tussock grasslands – goats	Palatable plant species, some of which are rare or at their distributional limit	1. Shooting 2. Dog control	Goat numbers reduced and managed to low densities, protecting defined natural values	Banks Peninsula
Mountain lands and tussock grasslands – thar	Tussock grasslands at high altitude and some highly palatable plant species	1. Recreational hunting 2. Commerical hunting 3. Departmental control	Thar numbers controlled to appropriate density, protecting defined natural values as identified in the thar control plan	Waitaki Rangitata
Grasslands, herbfields and riverbeds – rabbits	Tussock grassland communities and rare wildlife through the predator-prey relationship	1. Chemical 2. Shooting 3. Rabbit fencing	Natural values are protected by maintaining numbers below prescribed densities	Waitaki
Podocarp forests and tussock grassland in foothill areas – wallaby	Palatable native plants	1. Chemical 2. Shooting	Wallaby control plan implemented thereby ensuring natural values are maintained	Pareora
Braided riverbeds – mustelids and cats	Ground-nesting birds such as black stilt, wrybill and black-fronted tern	Trapping	Integrated habitat restoration and pest control, lowering predator take of riverbed bird populations	Waitaki (Project River Recovery)
Beech forest bird communities – stoats	Kaka, yellowhead, great-spotted kiwi	1. Hurunui mainland island habitat 2. Trapping	Pest control targeted, lowering predator take. Forest bird populations maintained and enhanced	Waimakariri (Arthur's Pass National Park) Hurunui (Lake Sumner Conservation Park)
Beech forest – deer	Lack of ecological objectives for RHA management	1. Recreational hunting 2. Monitoring	Recreational Hunting contributing to maintaining a desired ecological condition	Puketeraki (Mount Oxford)

5.2.9 Plant Pests and Exotic Plants

- managing the effects that plant pests have on fulfilling statutory obligations to protect indigenous biodiversity, and obligations to adjoining landowners
- removing, containing or establishing exotic plants on land managed by the Department

Current Situation

Background

The threat posed by plant pests to natural values in Canterbury is very large and varied. For example, broom and wilding pines displace grassland ecosystems at Jollie Pass, Russell lupins reduce nesting habitat for endangered wading birds in braided riverbeds, and gorse smothers rare plants in Banks Peninsula reserves. Over 80 different plant pest species threaten indigenous ecosystems, habitats or species in Canterbury. Many areas are threatened further as plant pests spread, or new plant pest species become established.

At present there are a number of exotic species plantings for amenity, commercial or scientific purposes on land managed by the Department, including exotic trees in the Craigieburn Conservation Park and cherry trees at Hanmer. Most of these require removal because of their threat to natural and historic resources. The Conservancy may retain some plantings of high amenity or scientific value, and will need to consider new plantings for specific purposes.

Responsibilities

The Conservancy has two types of responsibility for controlling plant pests:

- protecting natural values from threats posed by plant pests
- controlling plant pests on lands managed by the Department where they pose a threat to neighbours

When managing exotic plants, the Conservancy takes into account the following:

- the identification of exotic trees on land managed by the Department that may threaten natural values or have economic value
- the removal and containment of exotic trees from land managed by the Department because of their threat to indigenous natural and historic values
- situations where exotic forest planting would be appropriate on recreation, local purpose and unclassified reserves

Management

Historically, plant pests have been targeted for control without regard to what values they threaten in any particular place. Given the extent and scale of some of the plant pest infestations and the resource constraints faced by the Conservancy, it is necessary to systematically focus control where the natural values under threat are highest. Large plant pest control operations that are already in place to address threatened natural values are:

- broom and wilding pines at Jollie Pass
- sweet cherry at Aoraki/Mount Cook
- wilding pines in the Kirkliston Range
- Russell lupin and willow in the Waitaki district
- boxthorn on Motunau Island
- marram, boxthorn and lupin on Kaitorete Spit

Important areas in which there is currently little plant pest management but for which a plant pest problem exists include:

- broom and Spanish heath at Mount Grey/Maukatere
- old man's beard in Banks Peninsula reserves
- Russell lupin in the headwaters of key braided river systems, e.g. Waimakariri, Rakaia and Rangitata
- wilding trees in Craigieburn Conservation Park (agreement on their future control and management is required)
- wilding trees in the Hurunui, Waimakariri, Rangitata and Waitaki units

Statutory Framework

The Department's plant pest and exotic plants management work is given general legislative effect through the National Parks Act 1980 and the Reserves Act 1977. These require that 'exotic flora shall, as far as possible, be exterminated' in national parks and certain types of reserve.

The Biosecurity Act 1993 is the principal piece of legislation under which the control of all plant pests is undertaken on a national and regional basis. This Act replaces a raft of legislation, including the Noxious Plants Act 1978, and empowers the Ministry of Agriculture and regional councils to require land occupiers to eliminate or contain plants declared to be noxious.

The Biosecurity Act enables Government and regional councils to take a range of measures to ensure plant pests are adequately controlled through the preparation of national and regional plant pest strategies. A strategy specifies: the actions that must be taken to achieve control of a pest, the management agency responsible for implementing the strategy, how the strategy will be funded, the extent to which land occupiers are required to be involved, and enforcement measures to ensure compliance with these requirements. The provisions of the Noxious Plants Act remain in effect during a transitional period.

The presence of exotic trees is inappropriate in national parks, nature reserves, scientific reserves, section 19(1)(a) scenic reserves, and most conservation parks and conservation areas. Under Section 75 of the Reserves Act, however, recreation, local purpose, and unclassified reserves can be afforested with the consent of the Minister, subject to restrictions to protect natural and historic values.

Objectives

- To identify significant plant pests on land managed by the Department, assess the risks they pose to natural values, and undertake control where it best contributes to indigenous biodiversity conservation and landscape protection.
- To maintain good neighbour relationships with adjoining landholders by co-operatively undertaking boundary control responsibilities.
- To remove exotic trees in national parks, nature reserves, scientific reserves and section 19(1)(a) scenic reserves to protect their indigenous natural and historic values.
- To remove or contain exotic trees in conservation areas to protect their indigenous natural and historic values.
- To allow exotic plantings on recreation, section 19(1)(b) scenic, local purpose and unclassified reserves and conservation areas, in exceptional circumstances where exotic species will not adversely affect indigenous natural or historic values.

Implementation

The Conservancy will:

1. Complete and implement the Canterbury Conservancy Draft Weed Control Strategy 1994.
The strategy will be consistent with, and assist in the implementation and achievement of this CMS.
2. Undertake statutory obligations:
 - discharge any remaining obligations to control class A, class B target and class B widespread noxious plants under the Noxious Plants Act 1978
 - discharge agreed obligations arising out of national and regional pest management strategies established under the Biosecurity Act
3. Set priorities for plant pest management on land managed by the Department for areas where plant pests are identified as a threat.
(5.2.3 Land Ecosystems, Implementation 3 provides the basis for assessing conservation priorities.)
4. Identify significant landscape areas and archaeological, historic or amenity sites that are threatened by plant pests.
5. Select from the following control to best use available resources to minimise the long-term management costs.
 - Eradication: the permanent removal of all individuals of a species from a location. There must be:
 - no or a very low, probability of re-invasion from outside sources;
 - effective control methods available which can:
 - target all individuals in the population
 - remove individuals faster than the rate of increase of the species
 - still remove individuals at very low densities
 - certainty that the eradication programme can be completed.

- Initial Control: a new control effort that will result in a long-term reduction in occurrence over a specified time frame.
 - Maintenance: a follow-up control effort to remove regenerating plants, usually in control or eradication.
 - Containment: control resulting in containment of a plant pest problem, often to acceptable statutory or good neighbour requirements.
 - Ongoing Control: control efforts (excluding boundary clearances) which require ongoing commitment of resources and/or where there is little likelihood of achieving a long-term reduction in occurrence
- When further assessing the strategy for control the Conservancy needs to take into account the following:
- feasibility of eradication
 - ability to control seed source
 - surrounding land management
 - history of control
 - cost
6. Assess the appropriateness of control methods for all operations in the following priority order:
 - prevention
 - successional displacement
 - biological control
 - physical control
 - chemical control
 7. Conform to regional rules for herbicide application and meet all other statutory requirements as necessary.
 8. Prepare a logging plan for each harvesting operation of exotic trees, detailing:
 - the site
 - harvesting methods to be used
 - effects on natural and historic values
 - riparian protection measures
 - mitigating measures
 - site restoration
 - regional and district council RMA requirements
 - where harvesting will enable the acquisition of some natural or historic resource
- 8 why the trees are not required for conservation purposes
- 5.5.6 (Environmental Protection) will apply (as well as the public notice provisions of section 49 of the Conservation Act).
9. Contain exotic tree areas and prepare operational plans for all these areas to:
 - identify adjacent natural and historic values
 - assess the threat to adjacent natural and historic values
 - control and contain exotic forest spread
 - allocate responsibility
 - set measurable enforcement criteria
 - retain trees of scientific or amenity value
 10. Consider applications for exotic plantings on conservation areas and section 19(1)(b) scenic, recreation, local purpose and unclassified reserves where the following criteria are met:
 - significant recreation, scientific, landscape or cultural benefits can be achieved
 - no adverse effects on indigenous biodiversity or historic resources will occur
 - indigenous plantings have been considered
 11. Manage departmental land and advocate for other landholders to manage land in such a manner that the risk of introducing plant pests is reduced.
 12. Consult with adjoining landholders, Ngāi Tahu and interested public where conflicts of interest are likely to arise as a result of plant pest control operations.
 13. Co-ordinate control operations with adjoining landholders or administering authorities wherever possible.
 14. Consider the potential effects of all plant pest control proposals and work on land managed by the Department on the adjoining state highways; particularly road safety issues including visibility, icing effects and impact hazards.
 15. Train staff in the safe handling and use of chemical sprays. All chemicals must be applied and stored in accordance with the Agrichemical Users' Code of Practice 1995.
 16. Advocate that district and regional plans include objectives, policies and methods to prevent increases in the spread of plant pests (including wilding pine spread), and which require any proposed activity or development to avoid, remedy or mitigate adverse effects from the spread of plant pests.

17. Advocate for district and regional plans to raise awareness of threats that plant pests pose to indigenous ecosystems.
 18. Advocate for suitable herbicide application rules in regional plans that foster protection of native vegetation.
 19. Participate in educational programmes to raise awareness of plant pest threats, in particular:
 - the spread of environmentally damaging plant pests
 - the passive movement of plant pests on clothing, cars, boats and stock
 - the threat plant pests pose to indigenous biodiversity, particularly ornamentals with a high plant pest potential
 - the use and distribution of ornamentals with a high plant pest potential
 20. Advocate to farmers, other landholders, and interested members of the public for plant pest control where significant indigenous ecosystems, species and plants are under greatest threat from plant pests.
 21. Encourage and support research into the following aspects of plant pest control:
 - control options
 - chemical, biological control
 - evaluation of control policy and programmes
 - effectiveness and economics
 22. Undertake operational monitoring of all plant pest control operations, including the following:
 - pre-monitoring of natural condition and plant densities
 - post-operation density performance monitoring to determine project effectiveness
 - various post-operation monitoring of natural values to determine improvement in natural quality.
 23. Prepare an inventory of exotic trees on land managed by the Conservancy to determine:
 - land status
 - cost, feasibility and benefits to be gained by revegetating with indigenous plant species
 - amenity and scientific benefits of retaining exotic trees
 - ongoing management costs including wilding spread
 - economic benefits of removal
- Exotic forest areas will then be categorised under 'remove', 'contain' or 'manage'.

Priorities

Primary

The Conservancy's main priorities are to discharge any remaining obligations to control noxious plants under the Noxious Plants Act; any obligations in national and regional pest management strategies (established under the Biosecurity Act) that are agreed to by the Department and the Crown; and the protection of indigenous biodiversity and landscapes on land managed by the Department.

Secondary

The Conservancy will also advocate for plant pest control for the protection of significant natural values on freehold and leasehold land. This will seek to enhance indigenous biodiversity in Canterbury.

Priority Sites

In recognising that priority protection sites have yet to be identified, Table 24 outlines the sites where important plant pest control activities are underway, and these will continue to use much of the available resources.

The priority sites have been selected on a qualitative assessment of the threat posed to ecosystems in Canterbury, using the criteria in Implementation 3. Six sites are listed for their contribution to protecting indigenous biodiversity, while Craigieburn Conservation Park is included for landscape conservation reasons. This list will form an interim basis for directing plant pest control and exotic plant management on land managed by the Department in Canterbury. Other plant pest and exotic plant management control will be undertaken according to the Canterbury Conservancy Weed Control Strategy 1994, when approved, and the above implementation statement.

Less Achievable Tasks

Tasks that the Conservancy may not be able to undertake or complete include the control of:

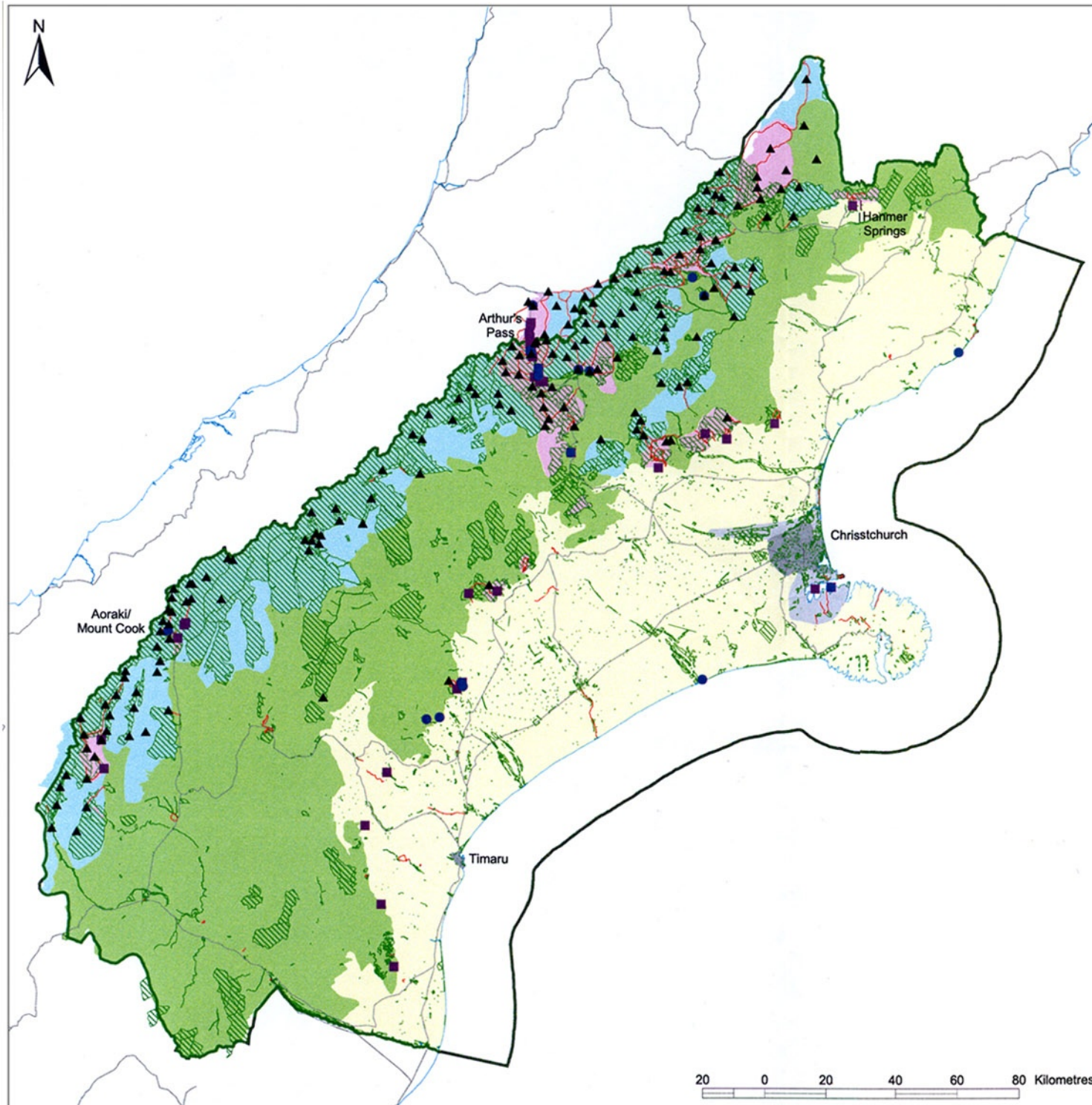
- lupins, broom and gorse in extensive braided river wildlife habitats of the Rangitata, Rakaia, Waimakariri, Ashley/Rakahuri, Waiau, and Conway (Tūtae Putaputa) rivers
- wilding pines in many intermontane basins
- old man's beard in some forested areas
- lesser priority sites, such as North Canterbury dune systems being invaded by marram grass
- Waiau valley broom
- hawkweed in most areas

Table 24: Key Plant Pests and Exotic Plants Priorities

Theme	Issue	Method	Results Sought	Place
Tussock grasslands	Replacement of tussock grassland communities by conifer forest throughout Kirkliston Range	1. Implement wilding control plan	Integrity of tussock grassland communities protected by eliminating all wilding trees and removing the seed source	Waitaki (Kirkliston Range)
Sand dunes	1. Displacement of pingao and other foredune plants, by marram grass 2. Modification of the foredune structure in one of the best national examples of this community	1. Chemical and physical removal of marram grass	Least modified foredune areas protected by the prevention of future spread of marram and its complete removal from the southern end of the spit	Plains (Kaitorete Spit)
Induced shrubland	Nesting prions, penguins and other seabirds becoming entangled and impaled in boxthorn thickets	1. Chemical/physical removal	To protect nesting seabirds by removing boxthorn from Motunau Island	Lowry (Motunau Island)
Subalpine shrublands and cushion herbfields	Displacement of shrubland and cushion herbfield communities in Jollies Pass Scenic Reserve by broom and wilding conifers	1. Chemical/physical control 2. Biological (broom) 3. RMA advocacy 4. Chemical/physical control	To maintain tussock grassland communities in Jollies Pass Scenic Reserve by containment of broom and wilding conifers	Hurunui – Jollies Pass, Hanmer
Braided rivers	Degradation of braided river habitat for threatened wading birds by Russell lupin, willow and brushweeds	1. Physical, chemical and biological control	To maintain braided river habitat in the Ahuriri, Tasman and Tekapo rivers	Waitaki – Project River Recovery
Lowland podocarp forests	Smothering of forest canopy by old man's beard and collapse of forest structure	1. Physical and chemical control	To maintain podocarp forest remnants in Banks Peninsula reserves	Banks Peninsula reserves
Montane beech forests and tussock grassland landscape Exotic tree research plots	1. Replacement of tussock grassland vistas by conifer forest and invasion of beech forest by Douglas fir 2. What research plots have scientific or amenity value?	1. Physical/chemical methods 2. Identification and authorisation of exotic trees to be retained 3. Implement removal containment programme	1. To contain the spread of wilding conifers within Craigieburn Conservation Park and, where possible, maintain existing tussock grassland vistas 2. To allow the retention of exotic plantings of high research or amenity value which do not adversely affect natural values	Waimakariri – Craigieburn Conservation Park



Map 20 Recreation Facilities & Opportunities



Urban	▲ Hut
Urban fringe	● Camping ground
Rural	■ Picnic area
Pastoral	— Conservancy boundary
Back country	— Track
Remote	— Main road
	Land managed by the Department

5.2.10 Fire

- managing all wildfires on all state areas
- meeting all statutory requirements for fire administration

Current Situation

Many of Canterbury's ecosystems are at risk from fire; particularly those that contain easily combustible fuels such as grasslands, shrublands, sand dunes and forest communities. The Department is concerned with preventing and controlling fires on state areas and within a one-kilometre safety margin of their boundaries, and to prevent fires spreading onto land it manages. The danger of fire to these and other communities is calculated regularly using a nationally standardised New Zealand fire danger rating system. This information is used to advise the public of fire danger or when necessary to regulate the lighting of fires.

Canterbury's fire danger classification, as derived from the Rural Fire Management Code of Practice (1995) is B. The B classification relates to the minimum amount of resources a fire authority must have in its region. Currently the Department is meeting these requirements in Canterbury and has the following fire response capability:

- a co-ordinated command structure
- a fire support depot based at Rangiora
- fully trained and equipped personnel in all Area offices and in the Conservancy office
- four volunteer rural fire teams that are groups of trained fire-fighting volunteers (Teams are located in Christchurch, Timaru, Mount Thomas and Hanmer.)
- round-the-clock capability of responding to all emergencies

The Conservancy also administers the one-kilometre safety margin that surrounds land it manages. Measures the Department takes to reduce the risk of fire in these areas include:

- maintaining a close level of liaison with adjoining landowners
- operating a year-round restricted fire season that requires that adjoining landowners must obtain a permit to light a fire within the one-kilometre safety margin.
- declaring a prohibited fire season when the fire danger is extreme, banning fires in any state area or within the one-kilometre safety margin. This step is often undertaken co-operatively with other fire authorities as a regional fire prohibition.

Statutory Framework

The Forest and Rural Fires Act 1977, Rural Fire Management Code of Practice, Fire Service Act 1975 and the Forest and Rural Fires Regulations 1979 specify rural fire-fighting responsibilities and criteria for assigning these to administering organisations.

The Minister of Conservation is the Fire Authority responsible for the safeguarding of life and property by the prevention, detection, control and restriction, and suppression and extinguishing of fires on state areas and within a one-kilometre safety margin of their boundaries. The Department acts on the Minister's behalf to carry out these duties.

The term state area is defined in the Forest and Rural Fires Act 1977 and generally includes all land managed by the Department of Conservation. However, there are significant exemptions. For example, foreshore is excluded except when the (one kilometre) fire safety margin of any state area encroaches on that foreshore.

All fire authorities operate under the same legislation and in Canterbury they include the Ashley Rural Fire District, which includes Carter Holt Harvey Forests exotic plantation forests, Timberlands New Zealand Rural Fire District, local district councils for council-administered land or vested reserves and NZ Defence for Defence rural fire districts. Each fire authority is responsible for prevention, suppression and extinguishing of fires on land it administers or within their rural fire district boundaries.

Objectives

- To prevent or minimise fire damage to state areas in the Conservancy.
- To increase public and landholder awareness of the need for fire prevention and of the effect fire has on natural values.
- To provide an effective rural fire-fighting force in Canterbury by undertaking its rural fire-control responsibilities in a co-operative way with other fire authorities and rural fire organisations.
- To advocate that RMA plans avoid, remedy or mitigate the adverse effects of fire on outstanding landscapes, natural features and areas of significant indigenous vegetation or wildlife habitat.

- To allow the limited use of fire as a management tool to maintain or enhance a particular natural community.
- To assist in any nationally co-ordinated research programme or project implemented by the National Rural Fire Authority.

Implementation

The Conservancy will:

1. Give absolute priority (with the exception of safety to human life) to the control and suppression of wildfires on land managed by the Department.
2. Comply with the Forest and Rural Fires Act 1977, the Forest and Rural Fires Regulations 1979, the Fire Service Act 1975 and the Rural Fire Management Code of Practice.
3. Maintain a Fire Plan and update it annually.
4. Retain membership of the Canterbury and South Canterbury Rural Fire Co-ordinating Committees and, whenever possible, participate in joint fire activities (for example training, publicity) arranged by those committees.
5. Co-operate with neighbouring fire authorities to ensure mutual safety measures are in place for the protection of each other's adjoining lands.
6. Support the Department's volunteer rural fire teams.
7. Issue fire permits for all fires proposed within the fire safety margin of any state areas and for all fires lit on state areas; providing the Department is satisfied that all safety measures are adequately planned for.
8. Provide appropriate fire danger publicity to the public during the fire season. Participate in publicity arranged nationally by the Department and the National Fire Authority, and regionally by the Canterbury and South Canterbury Rural Fire Co-ordinating Committees.
9. Maintain daily fire weather index (FWI) readings. These will show fire danger levels and the fluctuations throughout the fire season.
10. Intensify fire control measures when fire danger exists. The FWI readings will form the basis of determining the level of control measures required.
11. Continue annual training of all staff and volunteers in fire equipment use, fire-fighting techniques and fire support operations. Joint training with adjoining fire authorities will be encouraged.
12. Maintain depots of equipment at all staffed field centres and other Authority Fire Depots where this benefits both parties. Fire equipment will be maintained in a state of immediate readiness.
13. Advocate to the Canterbury Regional Council, district councils and farmers the need to avoid, remedy, and mitigate the adverse effects of burning of significant native vegetation landscapes and animal habitats in the high country.
14. Consider the use of fire in rare situations as a tool to fulfil management objectives of land managed by the Department. The Conservancy would need to:
 - identify seral plant communities that would benefit from occasional burning
 - ensure no adjacent significant native vegetation would be adversely affected
 - consider the circumstances in which burning would be envisaged
 - abide by any conditions that may apply (5.5.6 Environmental Protection applies)
 - consult with interested parties
15. Assist in any nationally co-ordinated research programme or project implemented by the National Rural Fire Authority (see also 5.5.5 Research).
16. Pursue cost recovery for fire suppression and fire damage where a culpable party can be identified.

Priorities

Primary

The statutory requirements under the Forest and Rural Fires Act for the suppression of fires on state areas will be the first priority for action.

Secondary

- training exercises involving rural burns where fire suppression capability is needed
- RMA advocacy to avoid, remedy and mitigate the adverse effects of burning on significant native vegetation, landscape and wildlife habitat

Priority Sites and Actions

The existing fire suppression management is well planned and will suffice for the life of this CMS. Priority directions to further develop our ability to manage fires include the areas identified in the research implementation statements, set out in Table 25.

Less Achievable Tasks

Fire suppression has a very high priority and essentially there are no limitations.

See also: 5.2.6 Indigenous Species, Implementation 9
5.5.5 Research

Table 25: Key Fire Priorities

Name	Issue	Method	Results Sought	Place
Fire dynamics	Lack of knowledge on fire dynamics	1. Fuel type research 2. Fire control behaviour	1. To develop fuel type classification more appropriate to Canterbury e.g. grassland, scrubland 2. To develop predictive models of fire behaviour to assist fire management	All places
Fire response capability	Need to maintain efficient fire response capability	1. Staff and volunteer training 2. Fire plan	1. Effective and efficient response to fire-fighting responsibilities so that fires are controlled and prevented	All places
High country burning	Impact of high country burning on areas of significant natural value and for sustainable management	1. Ecological research on dynamics of burning on high country ecosystems 2. Advocacy for methods that avoid, remedy or mitigate adverse effects of fire in significant natural areas	1. To understand and predict the effects of past burning management on native plant communities 2. Assess the role fire has in modifying high country ecosystems 3. Reduce the use of fire as a farm management tool	Hurunui, Puketeraki, Waimakariri, Rangitata, Waitaki

5.3 Visitor Services

5.3.1 Introduction and Overview

Canterbury's abundant recreation opportunities are characterised by large braided rivers and high country lakes, extensive forested valleys, New Zealand's highest mountains and over 800 kilometres of coastline.

As well as having the most extensive alpine environment in the country, Canterbury has excellent fishing and white-water rivers, the country's best conditions for gliding, an international standard ski-run at Mount Hutt, diverse heli-skiing and cross-country ski opportunities and great potential for mountain-biking on farm tracks and unsealed roads. The region provides notable alpine and rock-climbing opportunities, as well as widespread and diverse areas for tramping, hunting, boating, swimming and fishing. Canterbury's residents and visitors have readily available access to these opportunities. The ease of 'getting away from it all', of having a rural backcountry or remote experience, contributes to the high quality of the Canterbury lifestyle. The public generally have free right of access to land managed by the Department.

The Conservancy's role in visitor services is to manage recreational access and facilities such as tracks and huts on land managed by the Department.

Areas managed include two National Parks (Arthur's Pass and Aoraki/Mount Cook); three Conservation Parks (Craigieburn, Hanmer and Lake Sumner); one National Reserve (Lewis Pass); many other scenic, historic and recreation reserves; conservation areas (including eight skifields); the Ohau, Mount Thomas and Mount Oxford forests; and fifteen walkways. These sites cover about 20 per cent of Canterbury's land area.

The Conservancy is facing a number of visitor service issues:

- numbers of international visitors are projected to increase
- the impact of visitors' recreation on vegetation, facilities and wildlife is not regularly monitored, making it difficult to establish impact trends and their significance
- most recreational use of the Conservancy huts and tracks is concentrated in a small number of facilities and varies widely around the Conservancy
- many of the Conservancy's huts and tracks appear to receive a low level of use
- new RMA and Building Act standards mean some huts, bridges, viewing platforms and toilets will need to be either upgraded or removed; through its Quality Conservation Management Systems the Department will ensure that all structures meet Building Act or other approved safety standards
- much signage and interpretation inherited from previous agencies needs to be upgraded or removed and replaced with information that meets corporate standards
- signs on or visible from state highways need to be designed and situated to the requirements of Transit New Zealand
- the Department needs to ensure visitors avoid or minimise their adverse effects
- an appropriate range of aircraft landing opportunities must be identified and managed; and limits on over-flying in sensitive areas must be advocated
- the effects of visitor growth, particularly at Aoraki/Mount Cook Village, must be managed

The growth of recreation and tourism may result in increased demands for access and other visitor-related facilities such as short walks, car parks and amenities. Nationally, the Department is guided on these issues by the Visitor Strategy 1996.

Over the next ten years and beyond, the Conservancy will direct its expenditure to provide more opportunities for walking, picnicking, camping and easy-to-moderate tramping (especially round-trips), and will designate specific tracks or areas for mountain-biking, four-wheel driving and horse-trekking. Monitoring of adverse effects will focus on high-use areas such as Arthur's Pass and Aoraki/Mount Cook national parks.

Other facilities that receive little or no use will be inspected and their condition monitored. When any low-priority hut, toilet, track or bridge becomes an environmental or safety hazard, it will be either removed, repaired or relocated, after consultation with the public. Facilities will not be left to 'fall down'. A review of facilities will be undertaken to determine priorities for facility construction, relocation, maintenance and removal.

Signs will be upgraded to national standards and interpretation installed along highways and major visitor locations. Community and tourist industry support will be sought for visitor centre functions that are not central to the Department's responsibilities.

5.3.2 Recreation Opportunities

- providing the settings for and access to a range of outdoor recreation opportunities

Current Situation

Background

About 900,000 people visit land managed by the Department in Canterbury every year. Most are Canterbury residents, but an increasingly significant proportion are international visitors making use of places such as Aoraki/Mount Cook and Arthur's Pass national parks, and the Mount Hutt skifield.

Wilderness Areas

Wilderness areas provide visitors with the opportunity to experience solitude, freedom, natural quiet, risk and isolation on nature's terms in a highly natural environment. These opportunities are becoming increasingly rare in New Zealand and internationally due to recreational facility development and the increasing use of aircraft. In a gazetted wilderness, established under the Conservation, Reserves, or National Parks Acts, no facilities or air access are permitted except for management or rescue purposes. The Adams Area, at the head of the Clyde and Havelock Rivers, has been identified as a potential wilderness by the Wilderness Advisory Group and by the Recreation Strategy for Canterbury Conservancy 1994 (see 4.8.6 Upper Rangitata/Rakaia, Map 10 and 5.4.2.9 Aircraft).

The existing Ōtehae Wilderness Area (Arthur's Pass National Park) does not meet the requirements of the Wilderness Policy 1983 because of its inadequate size and the presence of developments.

Access

The Conservancy has an obligation to provide or enhance public walking access to most lands it manages. Elsewhere, the Department has an advocacy role; particularly to encourage public access to rivers, lakes and coastline. Access can be restricted to protect natural and historic resources. Access is by permit only to nature and scientific reserves, special protected areas within national parks and wildlife sanctuaries. In wilderness areas, access is by foot only.

Public information about access is a necessary and effective management tool. It informs people about where they can or cannot go and advises if any restrictions apply (such as closing walkways during lambing or during periods of high fire risk).

There is a demand for access to land managed by the Department for use by off-road vehicles, including mountain bikes, dogs, and horses and pack animals. However, their adverse effects can be significant. These activities are therefore covered more fully in 5.3.4 (Visitor Impacts and Safety).

Walkways

Walkways are walking tracks that have a formal legal status under the New Zealand Walkways Act 1990. They are one way in which people gain access across private or public land for recreation. Survey definition is an essential requirement for legalising walkways over private land. It is necessary to register this type of access against a title of land. There are twenty-five walkways in Canterbury. Fifteen are managed by the Department and ten by other agencies and community groups. Few of the walkways managed by the Department are surveyed or gazetted. Many of Canterbury's walkways receive little use. Conservation boards have a statutory role to advise on new walkways.

Future

Important areas where there is currently little recreational management but where future action will be required include:

- providing a wilderness recreation opportunity in the central Southern Alps/Kā Tiritiri o te Moana
- obtaining improved access to land managed by the Department through the tenure review processes and RMA mechanisms
- obtaining land for recreation (alongside ecosystem protection) purposes through the tenure review process
- managing walkways with high use levels

Statutory Framework

Section 6(e) of the Conservation Act enables the Department to foster compatible recreation, including land, water- and air-based recreation, where it is consistent with conservation. The Conservation, National Parks, Wildlife, New Zealand Walkways and Reserves Acts provide walking opportunities over private or leasehold land where the landholder agrees. On land managed by the Conservancy, the Department has a direct management role. Off this land, it has an advocacy role.

Objectives

- To investigate wilderness status for land managed by the Department in the Upper Rangitata and Rakaia valleys and, if agreed by the Minister, gazette a Wilderness Area.
- To establish a range of walkways close to Timaru and Christchurch that can be used on a day-trip basis.
- To encourage co-ordination between recreational groups, landholders and resource management agencies to maintain and enhance the diversity of Canterbury's recreational opportunities.
- To encourage local authorities and landholders to facilitate appropriate public access to land managed by the Conservancy and along rivers, lakes and the coast.
- To identify public access opportunities to land managed by the Conservancy, provide this information to the public and enhance public walking access.

Implementation

The Conservancy will:

1. Seek the gazettal of a formal Adams Wilderness Area for land managed by the Department between the Rangitata and Rakaia headwaters, in conjunction with the West Coast Conservancy (see also 4.8.6 Upper Rangitata/Rakaia).
2. Seek the revocation of the Wilderness Area status of the Ōtehae area within Arthur's Pass National Park and, once revoked, manage it as a 'remote experience area'. The area will be managed as a Wilderness Area in the interim.
3. Liaise with local authorities, recreational groups and farmers to co-ordinate outdoor recreational facility provision and recreational access.
4. Advocate for effective and practical means in district plans (such as esplanade reserves and strips) to manage or enhance public access to rivers, lakes, the coast and land managed by the department, in liaison with Fish and Game Councils and recreational groups.
5. Negotiate for enhanced public access as part of the tenure review process.
6. Identify areas suitable and unsuitable for off-road vehicle use in conjunction with four-wheel drive groups and district councils and publicise these to potential users (see 5.3.4 Visitor Impacts and Safety).
7. Identify areas suitable and unsuitable for mountain-biking, in conjunction with recreation groups, and publicise these to potential users (see 5.3.4 Visitor Impacts and Safety).
8. Identify tracks and areas suitable or unsuitable for horse travel, in conjunction with recreation groups, and publicise these to potential users (see 5.3.4 Visitor Impacts and Safety).
9. Advocate access to other areas and roads (off land managed by the Department) suitable for off-road vehicles, mountain bikes and horses, where this is considered appropriate.
10. Encourage the formation of a trust that could develop a walk, bike and/or horse trail along the old Little River–Motukarara railway line.
11. Survey and gazette walkways over private land where long-term agreements have been reached.
12. *Seek advice from conservation boards and consult with and include interested parties in investigating, forming and gazetting new walkways that:*
 - meet increasing demand for short, accessible walks near centres of population (such as Christchurch and Timaru)
 - can be managed and maintained by community organisations and local authorities
13. Monitor the number of visitors, their activities (for example, climbing and biking), their demographic characteristics (such as their country or place of origin) and their patterns of use (such as time spent) on land managed by the Department.

Priorities

Primary

To investigate an Adams Wilderness Area and to provide or facilitate access to lands managed by the Department.

Secondary

To survey and formally gazette walkways as appropriate.

Tertiary

To maintain and enhance appropriate public access to the Banks Peninsula hills and coast.

Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include the development and management of any new walkways.

Table 26: Key Recreation Opportunity Priorities

Name/Theme	Issues	Methods	Results Sought	Place
Wilderness remote hunting, climbing, tramping	Aircraft access	1. Gazette Wilderness Area 2. Restrict aircraft access 3. Restrict development	Maintain wilderness qualities	Rangitata (Rakaia, Rangitata) and Waitaki/Godley Valleys)
Walkway creation and gazetting	Walkway insecurity through change in ownership	1. Survey and gazette priority walkways 2. Support new walkways near Christchurch and Timaru	Priority walkways formed and gazetted	All places
Banks Peninsula recreational access	Access to coastline and hills often undefined	1. Walkways 2. Easements 3. Signs/Interpretation 4. RMA advocacy 5. Information provision 6. Support Little River to Motukarara trail 7. Seek road stopping to create reserves	Maintenance and enhancement of appropriate public access	Banks Peninsula

5.3.3 Recreation Facilities

- managing facilities including tracks, bridges, toilets, huts, shelters, campsites, signs and any other structures provided by the Department for recreation

Current Situation

Background

The Canterbury Conservancy's existing recreation facilities were inherited from previous government departments, such as the New Zealand Forest Service and the Department of Lands and Survey. Many of these are backcountry huts and tracks, constructed for wild animal control work and other field work and when budgets were much larger than they are now. Historically, more facilities were provided in the backcountry than in the more easily accessible periphery of such areas. However, the periphery receives the most use by visitors and the Department must now direct more resources to the front country.

Activities

The majority of visitors take part in short walks, picnics, camping and sightseeing activities on the fringe of conservation areas. Other visitors go tramping, hunting, climbing, rock-climbing, ski-touring, off-road driving and mountain-biking. Three major, and a few minor, sporting events take place on land managed by the Department in Canterbury, for example the Coast-to-Coast multi-sport event.

Facilities

The Conservancy manages some 170 huts, shelters, bivouacs and associated toilets, more than 800 kilometres of tracks and routes and 200 kilometres of walks, more than 15 picnic areas, one fully serviced camp-ground, ten self-registration camping areas and seven informal camp-sites (see Map 20). Huts and camp-sites are subject to a national hut and national camp-ground fee system. Nearly 50 per cent of the huts are provided free of charge to users. About 60 per cent of hut fee revenue comes from only 25 huts.

Management

The Department can currently maintain the camp-grounds but not all of the huts and tracks under its control. Notably, one third of the huts and tracks receive very little use and are subsequently a low management priority. *The Recreation Strategy for Canterbury Conservancy* (1994) proposes which facilities are to be maintained, developed or rationalised.

The Department has recently applied a Quality Conservation Management System (QCMS) to the management of visitor structures. Objectives, accountabilities, procedures and standards have been established. Training programmes have been designed to introduce relevant staff to the philosophy of QCM as it applies to visitor structures.

Signs

A new, nationwide system standardises the appearance of all the Department's signs. The Conservancy's signs are being replaced in accordance with this system.

Roadsides

Roadside scenic experiences for visitors are an important part of the overall visitor experience, particularly through the Arthur's, Lewis, and Lindis passes. A co-ordinated approach to managing such sites (and at road-ends) by agencies responsible will enhance visitor enjoyment, minimise duplication, enhance facility standards, facilitate efficient waste management and provide for enhanced and integrated interpretation opportunities.

Future

Important areas where future action is required include:

- regular contact with recreation and interest groups (including residents' associations for settlements close to or within land managed by the Department)
- regular liaison and contact with district councils
- providing more roadside and road-end recreational facilities
- addressing, with public consultation, the management of low-priority facilities

- replacing the old sign system with the new national system
- liaison with Transit New Zealand, Canterbury Regional Council and district councils over roadside and road-end recreation facility maintenance and development

Statutory Framework

The National Parks Act 1980, Reserves Act 1977 and Conservation Act 1987 allow the Department to provide structures (buildings, signs, bridges and tracks) for visitors. Details concerning the range, number, type or location of facilities are covered by the Department's policies, management plans and strategies prepared under the provisions of these Acts.

The Occupiers Liability Act 1962, Resource Management Act 1991, Building Act 1991 and Health and Safety in Employment Act 1992 provide the frameworks for organisations such as regional and district councils and the Department to set environmental, resource use, building, safety and health provisions and standards for these facilities.

Objectives

- To design and construct appropriate facilities to national standards while avoiding, remedying or mitigating adverse effects on natural, historic and recreational values.
- To ensure all facilities meet statutory requirements and safety standards.
- To manage facilities based on their level of use, recreational or historic importance, environmental compatibility, condition and associated costs while providing a range of quality visitor experiences.
- To encourage volunteers to maintain low-priority facilities to acceptable standards.
- To focus most future recreational facility provisions on roadsides and road-ends and provide short tracks in front country areas that receive high visitor use.
- To maintain medium- and high-priority facilities in backcountry areas and to monitor the condition of low-priority facilities.
- To assess, in consultation with user groups, facilities in relation to the safety and welfare of users before they are removed.
- To manage a nationally consistent sign system which provides messages that are easy to read and understand, and that identify the areas, facilities, and services managed by the Department.
- To maintain and enhance the quality of visitor experience by protecting landscape vista and providing appropriate roadside facilities in consultation with affected agencies.

Implementation

The Conservancy will:

1. Review and implement, with public consultation, the Recreation Strategy for Canterbury Conservancy 1994.
2. Determine recreation priorities based on the following:
 - national criteria
 - level of use
 - recreational importance
 - environmental impacts
 - user issues
 - facility condition
 - present and projected costs
 - visitor safety

The Recreation Strategy assigns a high, medium or low priority to each facility, based on established criteria. In most instances facilities were categorised on the best available information as at 1994, particularly levels of use.

The views of recreation and interest groups will be taken into consideration when decisions are made regarding the removal or dismantling of a facility.

3. Collect facility user charges in accordance with national guidelines, by-laws or regulations.
4. Ensure appropriate toilet facilities are provided in high-priority areas to meet relevant Building Act structural and Resource Management Act discharge standards.
5. Identify natural hazards to facilities in their respective locations.

6. Maintain, develop, relocate or remove facilities according to their management priorities and the Recreation Strategy, in consultation with user groups.
7. Maintain medium- and high-priority facilities by the Conservancy to acceptable environmental, building, and health and safety standards.
8. Manage low-priority facilities by volunteers; failing that: dismantle, close, remove and relocate them when they fall below acceptable environmental, building and health and safety standards.
9. Encourage volunteers to maintain facilities where appropriate (see 5.1.3 Community Participation).
10. Ensure all facilities meet Resource Management Act, Building Act, and Health and Safety in Employment Act requirements. Modify or replace high-priority huts, shelters, toilets, tracks, platforms and bridges to comply with new departmental, environmental, building, and health and safety standards.
11. Prepare long-term facility upgrade, replacement, relocation or removal plans for each facility.
12. Replace existing recreation signs to comply with the new national sign system. Provide messages that are easy to read and understand.
13. Meet Transit New Zealand conditions and standards for signs and facilities along state highways (see 5.3.6 Interpretation, Implementation 10).
14. Explore opportunities for existing or new huts and camping areas to be managed on contract or by volunteers.
15. Maintain and update a recreational facilities database which will include huts, tracks, camp-sites, bridges and signs (directional and interpretive).
16. Liaise with Transit New Zealand and district councils to identify and manage key roadside facilities used by visitors.
17. Liaise with Transit New Zealand and district councils to ensure the disposal of waste is appropriate.
18. Periodically monitor levels of visitor expectations and satisfaction with facilities, services and recreational opportunities.
19. Liaise with district councils on the advertising and signposting of facilities for the disposal of waste from vehicle holding tanks.

Priorities

Primary

The primary responsibility is to ensure that all existing and new facilities meet appropriate environmental, building, and health and safety standards.

Other primary priorities are to:

- maintain identified high- and medium-priority facilities
- maintain a high standard of track marking
- improve the standard of existing roadside and road-end facilities
- increase the range of roadside and road-end facilities where these are lacking elsewhere in the Conservancy

This means an emphasis will be placed on providing quality opportunities for short walks, picnicking, sightseeing, camping and easy overnight tramping. Providing information about these opportunities through publications, signs and interpretation is a primary responsibility. Regular meetings with recreation groups will also continue.

Secondary

The secondary priority is to inspect and monitor the condition of all identified low-priority facilities. Monitoring of the numbers of visitors to land managed by the Department is already occurring but will need to be expanded to cover visitor expectations, satisfactions and recreation impacts.

See also: 5.1.4 Communication and Liaison
 5.3.4 Visitor Impacts and Safety
 5.3.6 Interpretation

Less Achievable Tasks

Tasks which may not be undertaken or completed include:

- maintaining identified low-priority facilities
- establishing new huts that are not national priorities
- establishing new or extensive tracks that are not national priorities

Table 27: Key Recreational Facility Priorities

Theme	Issue	Methods	Results	Place
Backcountry tramping and hunting	High regional and national priority area. One of three main areas for easy to moderate tramping and hunting; easy access from Christchurch and other centres	1. Facility development maintenance and rationalisation 2. Facility management by other groups 3. Signs 4. Education	1. Popular facilities maintained and improved 2. Maintenance on low-priority facilities reduced	Hurunui-Lewis Pass, St James, Lake Sumner Conservation Park
Backcountry short walking, tramping, camping, remote climbing and hunting; alpine areas	Regional and national priority area. One of three main areas in Canterbury for backcountry short walking, easy to moderate tramping, moderate alpine climbing; easy access from Christchurch and other centres	1. Facility development, maintenance and rationalisation 2. Facility management by other groups 3. Signs 4. Education	1. Short walking tracks maintained and improved (particularly near SH73) 2. Huts popular for overnight tramping maintained and improved	Waimakariri – Arthur's Pass National Park, Craigieburn Forest Park
Backcountry tramping, picnicking, camping, hunting and mountain-biking; foothills areas	High local priority area. Most accessible backcountry area to Christchurch	1. Facility development, maintenance and rationalisation 2. Facility management by other groups 3. Signs 4. Education 5. Specify tracks suitable for mountain-bikes.	Short tramping, walking, picnicking and camping facilities maintained and improved	Puketeraki – Mt Thomas, Mt Grey and Mt Oxford forests
Passive tourism – scenic flights, guided tourism, guided hiking, climbing, skiing, private tramping, hunting, climbing and skiing	High regional, national and international priority area. Reduced visitor satisfaction due to poor quality facilities and over-commercialisation	1. Review village section of Mount Cook plan 2. Facility charges 3. Upgrade village facilities 4. Investigate a more appropriate village management structure	Quality of Aoraki/Mount Cook Village facilities upgraded including short walks and camp-ground	Waitaki – Aoraki/Mount Cook National Park, Ōhau Forest
Hut fee compliance	Lack of user compliance	1. Persuasion 2. Education 3. Hut Wardens 4. By-laws/regulations	High levels of hut fee compliance	All places
Recreational facilities	Vandalism, fire, natural hazards, deterioration, safety	1. Maintenance of high-and medium-priority facilities 2. Development of new facilities, particularly at road- ends 3. Community involvement and maintenance of low-priority facilities 4. Rationalisation of low- priority facilities 5. Seek statutory approvals, consents and permits	1. High-and medium-priority facilities maintained and enhanced 2. Enhanced recreational opportunities, particularly at road-ends 3. Community involvement in decisions 4. Rationalisation of low-priority facilities 5. Environmental, health, safety and building standards met	All places
Signs	National sign system implementation, vandalism	Installation of new signs	High quality nationally consistent signs	All places

5.3.4 Visitor Impacts and Safety

- managing the impacts of visitors on natural and historic resources
- promoting visitor safety

Current Situation

Background

The number of international visitors to conservation areas is expected to increase. The greatest impacts from this will occur at national parks such as potentially with aircraft noise. A moderate increase is predicted for domestic visitors and will affect all areas managed by the Department which are already well used. Impacts from recreation activities are not systematically monitored.

The present amount and type of recreational use appears to be within the capacity of most facilities. However, over summer crowding occurs at a few camp-grounds, on some tracks and in some huts. Capacity problems are expected to occur with projected increases in international visitors, mainly at Aoraki/Mount Cook Village. Rock-climbing is having noticeable effects on local crags on the Port Hills and at Castle Hill.

Motorised Off-road Vehicles

Motorised off-road vehicles such as trail bikes and four-wheel drive vehicles have the potential to cause significant damage to natural and historic values and can disturb or endanger other users. The Department has been asked by some four-wheel drive clubs to allow the use of off-road vehicles on land managed by the Department. The Department considers there are more suitable areas available for off-road vehicle use outside land it manages, and encourages the use of these alternative areas. There is no obligation for the Department to provide opportunities for this form of recreation.

Mountain Bikes

Mountain-biking is a rapidly growing activity. There is a demand for off-road biking opportunities in natural areas, but concern has been expressed about potential conflict with trampers and walkers, including their safety. Mountain-biking can cause considerable damage to foot tracks and can also have adverse effects on natural and historic resources. National guidelines will be used to assess which tracks may be suitable for mountain bike use and to guide management of these opportunities.

The off-road use of mountain bikes (and other vehicles) is prohibited in Arthur's Pass and Aoraki/Mount Cook national parks, certain reserves and other lands managed by the Department.

Mountain-bike access will need to be managed in high use areas such as Lake Sumner Forest Park, Mount Thomas Forest, Oxford Conservation Area, Hanmer Forest Park, Craigieburn Conservation Park and Banks Peninsula reserves.

Tracks in other areas and off land managed by the Department may be suitable for mountain-biking. The use of these areas could be considered. Legal roads running through land managed by the Department may also be suitable.

Dogs

While the Dog Control Act 1996 provides extensive powers for dog control, the Minister of Conservation may also, under the Conservation Act 1987, declare areas of land managed by the Department to be either a 'controlled dog area' or an 'open dog area'. Permits will be required to take dogs into 'controlled dog areas' but not for 'open dog areas'. Both areas can have varying seasonal controls. Identification of these areas will be determined by the vulnerability of fauna to dogs and potential conflict with other uses. Exceptions will apply where specific management activity requires the use of dogs and is provided for in any management plan. For example, dogs will be allowed in Arthur's Pass National Park (by permit) for control work on introduced animals. Permits will not be required for seeing-eye dogs, search and rescue dogs, Police and Customs Department dogs, or dogs used by the Department in species management programmes. Certain areas are not able to be declared 'open dog areas'. These include national parks, wilderness areas, ecological areas, scenic or scientific reserves, wildlife refuges, sanctuaries and management reserves.

Areas proposed to become 'open dog areas' or 'controlled dog areas' must be identified within a discussion document that is publicly notified and submissions invited. Following this consultation process, and after taking public submissions into account, a number of areas will be submitted for gazetting as 'open dog' or 'controlled dog' areas.

Once the area is gazetted, the Department has powers to seize or destroy dogs not under proper control within any open or controlled dog area. The provisions of the Dog Control Act still apply outside these areas.

Horses and other pack animals

Horses are used by visitors in some areas but use is generally low. They provide a special recreational experience and can be used for stock management. Horses, donkeys, mules and other pack animals (such as llamas) can introduce or spread weeds, damage native vegetation through trampling or browsing and damage foot tracks or river and stream crossings.

Conflict may also occur between horse riders and trampers on popular tracks. There may, however, be areas where horse riding and trekking opportunities can be provided without compromising natural, historic or recreation values (such as on old roads or suitable low use tracks passing through areas that are already substantially modified).

Care Codes

A New Zealand Environmental Care Code (n.d.) and a New Zealand Water Care Code (1995) have been prepared to encourage visitors to behave responsibly in the outdoors. 'Carry-out' rubbish bags are provided at the Department's visitors centres and in some huts for people to take their rubbish away from the backcountry. Most picnic and camping areas are supplied with rubbish facilities.

Impacts from visitors can be reduced to acceptable levels if the Environmental Care Code is followed. It makes good sense to remove all rubbish from the backcountry (that left by visitors and the Department) so that new or repeat visitors can enjoy an unspoilt environment. Removing rubbish also reduces the risk of injury to wildlife, such as kea.

Visitor Safety

The New Zealand Police is responsible for land and sea search and rescues, but the Department assists when operations are carried out on land it manages. The Department provides and checks visitor signing in and out books at visitor centres, most huts and some road-end access points. The use of mountain radios and cellular phones, where suitable, is encouraged by the Department.

Concessionaire Activity

All concessionaires are required by concession conditions to have considered visitor safety issues and to meet industry standards for such as snow safety and ski area facilities.

Future

Important areas where there is currently little management for visitor impacts and safety, but where future action will be required are:

- monitoring adverse effects in high use areas
- managing the adverse effects of dogs on land managed by the Department and determining 'open' and 'closed' areas

Statutory Framework

The National Parks Act 1980, Conservation Act 1987, and Reserves Act 1977 empower the Department to foster recreation while protecting natural and historic resources.

The Dog Control Act 1996 and the above three Acts enable the Conservancy to control dogs on land it manages. The Department may gazette areas open to dogs and areas where access will be controlled. The Department also has specific powers to deal with unauthorised dogs and their owners.

The Department is required to provide adequate information and facilities for rubbish removal under the provisions of the Litter Act.

Objectives

- To manage significant visitor impacts on natural and historic resources by applying effective long-term methods and approaches which avoid, remedy or mitigate adverse effects.
- To raise visitors' awareness of their impacts and encourage them to minimise adverse effects.
- To provide safety information for visitors, recognising they will be primarily responsible for their own safety.

- To seek to prohibit (by by-laws and regulations) the use of off-road vehicles (trail bikes, four-wheel drive vehicles and mountain bikes) on land managed by the Department, except for specified management purposes or where their use for access or recreation purposes is specifically permitted.
- To identify and gazette areas of land managed by the Department open to dogs, and those areas where dog access is controlled.
- To seek to prohibit (by regulation or by-law) the taking of horses, pack animals and domestic pets (including cats, but excluding dogs) on to land managed by the Department where natural, historic or recreation values are likely to be adversely affected.

Implementation

The Conservancy will:

1. Utilise the Department's manual Management Techniques to Reduce Visitor Impacts (1994) as a basic reference to manage the adverse effects of visitors.. The aim of management will be to avoid, remedy or mitigate any such effects.
2. Manage visitor impacts in accordance with the following:
 - land status
 - natural, historic and recreational values
 - facility or opportunity priority
 - extent, history and significance of impacts
 - adverse effects on other visitors
 - costs to management and concessionaires
 - ensuring that concessionaires bear the costs of adverse effects arising from their impacts
3. Consider the following approaches, either alone or in combination, to best use available resources with the long-term aim of minimising adverse effects and management costs:

Visitor Type: Altering the type of use and visitor behaviour to encourage low- impact behaviour.

Use Location: Shifting use to durable sites, or dispersing or concentrating use to modify the impacted area.

Use Timing: Altering use timing so that it is least likely to impact on the environment or other visitors.

Expectations: Modifying the expectations of visitors of the types and conditions likely to be encountered.

Hardening: Artificially increasing the resistance of the impacted resource by hardening or shielding it from impact.

Sites: Reducing use of specific sites, rather than entire areas.

Rehabilitation: Address specific causes rather than treat symptoms, such as maintaining tracks or removing litter.

Area Limits: Control the amount of use associated with each area, sometimes known as the carrying capacity. The relationship between visitors, facilities and the environment is very complex, and no simple formula is available. This is a last-resort approach.
4. Assess the appropriateness and effectiveness of combinations of the following methods to manage the adverse effects of visitors:
 - information provision
 - persuasion
 - enforcement
 - site manipulation
 - regulation or status change

Because the essence of recreation involves freedom of choice, it is important to use techniques that minimise visitor costs and maximise freedom of choice where possible. Management may need to shield or avoid areas, or harden sites in instances where natural, cultural or historic resources are being adversely affected. Tracks or boardwalks are two such methods. Imposing regulations would be a last-resort technique, to be used in exceptional situations where adverse effects are high or irreversible, or where the values have high significance or a low resistance to adverse effects.
5. Manage the impacts of visitors by seeking (where they are the most appropriate and efficient methods) regulations or by-laws under section 123 Reserves Act, section 56 National Parks Act or section 48 Conservation Act; while having regard to Implementations 2, 3 and 4.
6. Fill in existing rubbish pits near huts and provide carry-out rubbish bags.
7. Distribute the New Zealand Environmental and Water Care Codes to inform visitors of their responsibilities to mitigate the adverse effects of their impacts.

8. Assist the New Zealand Police and voluntary groups with search and rescue operations on land managed by the Department.
9. Maintain and install radio facilities in appropriate huts.
10. Encourage visitors to remote and difficult areas to take mountain radios and, where appropriate, cellular phones.
11. Provide appropriate warnings to visitors (through the media) during periods of heavy snow or rainfall, or when other hazards pose a threat to public safety.
12. Promote visitor safety in the use of departmental facilities.
13. Approve and monitor concessionaire activities and facilities and require safety programmes.
14. Recognise recreation groups (including mountaineering and ski groups and clubs) as knowledgeable and skilled in mountain safety; and encourage their co-operation in imparting those skills and knowledge.
15. Confine the use of motorised off-road vehicles (such as trail bikes and four-wheel drive vehicles) on land managed by the Department to formed roads and carparks, except for management purposes or where their use for access is specifically permitted.
16. Identify tracks and roads suitable for mountain-biking using the following criteria, based on the national guidelines:
 - status of the land
 - the potential for adverse effects on natural or historic values or sites of cultural significance on or near the track
 - the potential for adverse effects to accelerate erosion or cause other damage to track surfaces, as measured against the effects of walking
 - the level of use by other visitors
 - the potential to accommodate both bikers and walkers on the track
17. Indicate at track and road entrances whether mountain-biking is permitted and notify conditions placed on mountain bike use.
18. Identify and gazette areas of land managed by the Department which are to be open to dogs and those areas where dog access will be controlled:
 - prepare a discussion document identifying areas proposed to become 'open dog areas' or 'controlled dog areas'
 - undertake public consultation on the areas
 - gazette 'open dog areas' and 'controlled dog areas'
 - identify special conditions applying to 'open dog areas' and 'controlled dog areas'
 - ensure information on 'open dog' and 'controlled dog' areas is well publicised in pamphlets, signs, maps and other visitor information material prepared by the Department.
19. Restrict the use of horses, donkeys, mules and other pack animals to formed roads and identified tracks on land managed by the Department. Seasonal restrictions may apply.
20. Assess and identify tracks and roads suitable for horseback riding, horse trekking and other pack animal use, using the following criteria:
 - status of the land
 - the potential for adverse effects on natural or historic values or sites of cultural significance on or near the track
 - the potential for adverse effects to accelerate erosion or cause other damage to track surfaces, as measured against the effects of walking
 - the level of use by other visitors
 - the potential to accommodate both riders and other users on the track
 - the cost of providing or upgrading facilities to accommodate horse riders (such as bridges and additional track maintenance work)
21. Address aircraft noise and activity effects through the concessions process (see 5.4.2.9 Aircraft).
22. Encourage visitors to observe and monitor activities and facilities on land managed by the Department and relay concerns and other comments to the Department.

Priorities

Primary

The primary priority is to inform visitors on safety issues, to seek their compliance and to avoid adverse effects on land managed by the Department.

Secondary

A secondary priority will be to monitor the adverse effects of visitors. Initially, monitoring will be targeted at what are already considered to be activities with high or potentially high adverse effects. For example, aircraft in Aoraki/Mount Cook National Park, tramping and running events in Arthur's Pass National Park, mountain-biking in the Mount Thomas Forest and Oxford Conservation Area.

See also:

- 5.3.2 Recreation Opportunities
- 5.3.3 Recreation Facilities
- 5.4.2.8 Ski Areas
- 5.4.2.9 Aircraft
- 5.5.6 Environmental Protection

Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include:

- monitoring the adverse effects of all recreation activities in all locations
- maintaining tracks and bridges to standards suitable for horse riding and trekking and mountain-biking

Table 28: Key Visitor Impact and Safety Priorities

Theme	Issue	Methods	Results Sought	Place
Rockclimbing	Loss of natural and cultural values due to impacts of rock climbers	1. Education of rock climbers 2. Signs 3. By-laws to exclude areas of high value	Protect limestone formations and Māori cultural sites from effects of rockclimbing	Waimakariri (Castle Hill)
Passive tourism –scenic flights, guided tours; active tourism guided hiking, climbing, skiing, private tramping hunting, climbing and skiing	Reduced visitor satisfaction due to poor quality facilities, over-commercialisation, aircraft noise and landing space conflicts.	1. User pay research on visitor impacts 2. Aircraft noise abatement technology/ methods 3. Liaison with CAA/ users/district councils 4. Exclusion areas for aircraft landings	1. Mitigate the adverse effects of aircraft noise on Aoraki/Mount Cook National Park 2. Ensure visitor safety	Waitaki (Aoraki/Mount Cook National Park)
Mountain-biking	1. Track damage 2. Use conflicts	1. Define mountain bike tracks 2. By-laws/regulations	Enabling mountainbike users to enjoy recreational pursuits whilst minimising conflicts with other uses and the site	Hurunui Puketeraki Banks Peninsula
Skifields	1. Avalanches 2. Facility failure	Require safety conditions in concessions	Minimise possibility of death or injury	Waimakariri Rangitata Pareora Waitaki

5.3.5 Visitor Centres

- operating visitor centres to provide information, interpretation and retail products to the public

Current Situation

Background

Historically, visitor centres were located by the priorities of the former New Zealand Forest Service and the Department of Lands and Survey. Not all of these facilities were necessary, and some were not located to maximise public use. Visitor centres should be located where large numbers of people can visit.

The Department's two visitor centres in the Conservancy (as at February 1998) are at Arthur's Pass and Aoraki/Mount Cook Village. These are well used (see Table 29) and provide information on conservation and local areas, emphasising sensitive recreational use. Both are also members of the Visitor Information Network (VIN). Funded by the New Zealand Tourism Board, VIN is a nation-wide grouping of information offices that provide a quality information service to visitors at key tourist locations.

A Hurunui Visitor Information Centre at Hanmer Springs was jointly managed by the Department and the Hurunui District Council, and a visitor centre at Twizel was managed by the Department. Both centres are VIN members. The Department may continue to supply information to these centres.

Table 29: Visitor Centres and Services

Visitor Centre	1995/96 Visitor Numbers	Range of Services
Aoraki/Mount Cook	192,868	Basic information services plus detailed recreation maps and recreation information, including sales of the full range of publications, interpretation displays, tramping supplies and items such as T-shirts
Arthur's Pass	89,579	

The Conservancy also produces leaflets and publications about recreation opportunities on lands managed by the Department in Canterbury. A recent review of these publications rationalised what the Conservancy will produce over the next decade. The Conservancy's ability to quickly access requested recreational information needs to be improved.

Statutory Framework

Sections 6(c), (d), and (e) of the Conservation Act 1987 enable the Department to promote the benefits to present and future generations of conservation; to prepare, provide, disseminate, promote and publicise educational and promotional material relating to conservation; and to foster compatible recreation.

Objectives

- To provide high quality visitor centres in locations close to Department-managed areas, where a significant number of visitors can benefit from natural, historic and recreational information.
- To meet reasonable visitor needs, stimulate their interest and appreciation in natural and historic issues, and to enhance their enjoyment.

Implementation

The Conservancy will:

1. Foster local natural, historic and recreational opportunities on lands managed by the Department through the Conservancy's visitor centres and other information centres.
2. Provide Department visitor information centres in Canterbury with experienced staff who have local knowledge, and with material to enable staff to answer queries relating to land managed by the Department and Conservancy activities in their area; natural and historic values; and appropriate recreational use (see 5.1.4 Communication and Liaison).
3. Undertake regular reviews and, where warranted, alter visitor centre services to meet changing public needs and departmental priorities.
4. Develop a GIS-based recreation information system to quickly provide accurate information on facilities.
5. Encourage community financial and staffing support for Departmental visitor centres, particularly where there is a high level of tourist information not directly related to Conservancy management.

6. Retail products that promote natural and historic values and the appropriate use of land managed by the Department.
7. Ensure its visitor centres meet efficient standards of retail operation.
8. Provide a quality customer service that enhances the public understanding of natural, historic and recreational issues.
9. Provide support to non-Departmental visitor centres that promote the conservation and appropriate use of land managed by the Department.

Priorities

Primary

The primary visitor centre priority for Canterbury will be the upgrading of the Aoraki/Mount Cook Visitor Centre. The existing facilities are dated and this is a high-use facility.

Secondary

The second priority will be to assess what means of involvement the Department will have with the Hurunui and Twizel Visitor Centres.

Priority Sites

Table 30 outlines the priority sites for visitor centres. The Arthur's Pass and Aoraki/Mount Cook Visitor Centres will continue to be priority facilities over the term of this CMS.

Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include:

- opening, or joining with other agencies to operate new or existing visitor centres
- updating visitor centres
- opening visitor centres seven days a week

See also: 5.1.4 Communication and Liaison
 5.3.6 Interpretation

Table 30: Key Visitor Centre Priorities

Theme	Issue	Method	Results Sought	Place
Aoraki/Mount Cook Visitor Centre	To interpret the rich alpine history and values of the Aoraki/Mount Cook area	1. Crown funding 2. Corporate funding 3. Public donations 4. Visitor charges	An international standard visitor centre established, with appropriate interpretive opportunities	Waitaki (Aoraki/Mount Cook National Park)

5.3.6 Interpretation

- providing interpretation to develop visitor understanding of the natural and historic heritage in the Conservancy and to raise public awareness on natural and historic issues

Current Situation

Interpretation

Interpretation aims to stimulate interest, satisfy curiosity and provide insights into the natural and historic heritage that the Department manages. By encouraging and giving visitors a hands-on experience, it is hoped that they will become more involved with conservation. Interpretative techniques include visitor programmes, displays within visitor centres (see 5.3.5 Visitor Centres), brochures and outdoor signs.

On-site interpretive panels and displays can enhance a visitor's experience by providing stories, facts, anecdotes and explanations about an area's human and natural features. In addition, appropriate behaviour is more likely to occur if messages are incorporated in signs placed at key recreation sites (such as roadside and road-end carparks, viewpoints and natural areas close to urban centres).

A Draft Interpretation Strategy: Canterbury Conservancy 1991–2001 (1991) was prepared to address the inadequate number and quality of outdoor interpretative panels and signs in Canterbury and to provide direction for interpretative development over its 10-year time-frame. A national signage system was introduced to establish a consistent corporate image throughout the country. The Conservancy is progressively replacing signs to conform to the new standards.

Interpretative developments are largely dependent on recreation development and there is a need for close co-operation between the two. Major heritage themes (such as arānui/pathways, mountain uplift, braided rivers and high country settlement) and the sites for development have already been identified. The Draft Interpretation Strategy needs updating to be consistent with the Recreation Strategy for Canterbury Conservancy (1994) and this CMS.

Visitor Experiences

In past years, visitor programmes were run from five area offices over peak summer visitor periods and Easter. Numbers participating in these programmes have decreased over the last decade. Cost recovery targets and low levels of attendance have made some field centre programmes untenable.

The Department's aim with programmes is to provide or support the provision of quality experiences that visitors might not be able to take part in elsewhere. The important element is to provide natural and historic experiences and messages, rather than recreation and entertainment. Visitor programmes are ideal opportunities to promote understanding of the role of tāngata whenua in conservation. Ngāi Tahu interpreters at strategic sites are an excellent means of achieving this.

The increase in recreation and tourism concessions has provided alternative ways for visitors to undertake these experiences. (see 5.4.2 Concessions General) Other agencies such as some councils also provide visitor events and the Conservancy can work more closely with them in the future.

Important areas with the potential to expand community awareness include:

- tussock grasslands, wetlands and marine conservation
- ensuring relevant staff are skilled in public speaking and interpretation
- working with educational institutions to increase awareness

Statutory Framework

Section 6(d) of the Conservation Act enables the Department to prepare, provide, disseminate, promote and publicise educational and promotional material relating to conservation.

Objectives

- To provide a series of high-quality interpretive facilities and information to satisfy visitor expectations, increase understanding of natural and historic resources, encourage environmentally appropriate behaviour and promote visitor safety.
- To provide support to a range of appropriate events for visitors which increase public understanding of our natural, cultural and historic heritage, and the Department's roles and responsibilities.

Implementation

The Conservancy will:

1. Update and implement the Conservancy Interpretation Strategy consistent with the CMS, Conservancy Recreation Strategy and the Department's Visitor Strategy.
2. Set priorities according to the ability of facilities and events to achieve the greatest change in awareness and understanding of natural and historic issues among the maximum number of visitors.
3. Consider the following questions when developing sites for interpretation:
 - will the site have a large or small number of visitors?
 - is the site part of an aranui/pathway?
 - does the Conservancy's Recreation Strategy identify high-priority sites nearby?
 - does the site have a unique story to tell?
 - what is the Conservancy-wide significance of the natural features being interpreted?
 - is the site accessible to young families and old people?
 - will the site assist with mitigating visitor impacts? (see 5.3.4 Visitor Impacts and Safety.)
 - is the site an interpretive priority in the Conservancy Interpretation Strategy?
 - are there any national priorities associated with the development?
 - what languages do visitors speak or read?
4. Plan interpretive developments from each Area Office by an analysis of the following:
 - current interpretive resources
 - the themes to be interpreted
 - the target audience
 - identification of the key sites
 - an assessment of current visitor programmes
 - consistency with CMS and Interpretation Strategy priorities
5. Develop interpretation for localised areas around the following themes:

Hurunui:

 - human influence on the landscape
 - hot springs
 - exploration

Lowry:

 - coastal habitats
 - geology and landforms

Banks Peninsula:

 - human influence on the landscape
 - geology and landforms
 - coastal habitats including the Marine Mammal Sanctuary

Plains:

 - braided river ecosystems

Puketeraki:

 - human influence on the landscape
 - forest remnants

Waimakariri:

 - mountain ecology
 - geology and landform
 - exploration

Rangitata:

 - montane wetlands and tussock grasslands.

Pareora:

 - Māori rock art

Waitaki:

 - human influence on the landscape
 - endangered species
 - geology/landforms
 - history
 - mountain ecology

7. Choose an interpretation medium to suit the site to be interpreted, having regard to the following:
 - cost to develop and maintain
 - staff availability
 - number of visitors
 - time of year
 - effectiveness in interpreting specific stories
 - vulnerability to weather and vandalism
 8. Use departmental huts and other facilities as sites for low-cost localised interpretation.
 9. Liaise with West Coast Conservancy, Transit New Zealand, Canterbury Regional Council and the relevant district councils to develop interpretive developments comprising short walks, interpretive displays and associated facilities on the following priority state highways:

SH80: Pūkaki to Aoraki/Mount Cook

SH73: Lake Lyndon to Arthur's Pass

SH8: Burke Pass to Lindis Pass

SH7: Hanmer – Lewis Pass
 10. Meet the conditions and requirements of Transit New Zealand guidelines where any proposal along state highways requires access to or from the highway, where the signs would be visible from the highway, or where planting would be close to highways.
 11. Ensure signs and interpretation material comply with national standards.
 12. Prepare a Conservancy manual for the design and construction of interpretative signs.
 13. Co-ordinate interpretation and recreation facility development and programmes.
 14. Consult Papatipu Rūnanga over interpretative developments.
 15. Seek grants, sponsorship and joint funding for appropriate interpretive developments.
 16. Support interpretation training programmes for recreation and tourism concessionaires.
 17. Encourage and support associates and concessionaires in providing their own interpretation and visitor programme events, emphasising natural and historic resources.
 18. Consider the following questions when deciding whether to run Conservancy-managed visitor programmes, providing the event is adequately resourced through cost recovery, sponsorship or grants:
 - is there an audience for the visitor event?
 - will the event interpret significant conservation issues?
 - can the event meet visitor interests and expectations?
 - can the event be run more effectively by the Department or by another agency or concessionaire?
- Papatipu rūnanga will be consulted on the development and maintenance of visitor programmes.

Priorities

Primary

Firstly, to provide quality experiences which foster understanding among the greatest number of visitors and secondly, to upgrade the sign system to enhance visitor experience, particularly at road-ends.

Priority Sites

Sites on which important interpretation initiatives have commenced, and will continue to occupy a significant proportion of available resources in the immediate future, are outlined in Table 31.

The priority sites have been selected on a qualitative assessment of the need for conservation awareness in Canterbury, using the criteria in Implementation 3 and 4. The list will form an interim basis for directing interpretation on land managed by the Department in Canterbury.

Less Achievable Tasks

Tasks that the Conservancy may not be able to undertake or complete include:

- providing interpretation in some visitor centres run by other organisations
- operating visitor programmes

Table 31: Key Interpretation Priorities

Theme	Issue	Method	Results Sought	Place
Ngāi Tahu interpretation	Need to incorporate a Ngāi Tahu perspective in interpretation	Employ Ngāi Tahu interpreters at key locations (e.g. Aoraki/Mount Cook, Arthur's Pass) during peak visitor periods	Increased understanding among visitors of Ngāi Tahu custom	Waitaki Waimakariri Banks Peninsula
State highway signage and facility redevelopment Aoraki/Mount Cook visitor centre upgrade	Visitor numbers are concentrated on three key aranui/pathways in Canterbury: -SH7, SH8 and SH73 See 5.3.5 Visitor Centres	Work with other agencies to develop interpretive facilities at key locations	Increased conservation understanding and knowledge of recreation opportunities among road travellers	Hurunui Waimakariri Waitaki Waitaki
Interpretation on walking tracks in high use areas	The national parks provide a focus for day visitors and interpretive opportunities	Provide quality modern interpretation in and adjacent to Aoraki/Mount Cook and Arthur's Pass villages	Increased visitor understanding	Waimakariri Waitaki

5.4 Concessions and Other Uses

5.4.1 Introduction and Overview

Commercial and other uses of land managed by the Department are varied and widespread. They include resource use (public works, easements and grazing); site occupation (broadcast and telecommunication facilities, bee-keeping, private dwellings and structures, accommodation buildings); commercial filming; commercial recreation and tourism (guiding, aircraft landing, ski areas and sports events); prospecting, mining, and quarrying; military use; and traditional Māori uses.

For these activities the Department is primarily concerned with avoiding, remedying and mitigating adverse effects on natural and historic resources. The granting of any concession or privilege is dependent on the effect the proposed use will have on these resources.

The Department, through delegated authority from the Minister, has a responsibility to authorise appropriate commercial use. In some areas of Canterbury, lands managed by the Department are the only practical places to site public works such as water or sewage plants, power and telephone lines, pipelines or roads; or for easements for access to, or conveying services across, an area.

The wide river flats of the region mean there is a demand for grazing of land managed by the Department; and these concessions are managed on a commercial basis.

The physical nature of Canterbury means that to enjoy the best coverage, telecommunications installations must be situated on high peaks. As many of these peaks are within the land managed by the Department it inevitably follows that both public and commercial operators will seek to establish facilities on these areas.

The Department recognises that honey production and wintering-over beehives are generally compatible with the values for which land is managed by the Department.

Early recreational use of the lakes and rivers of the Conservancy has resulted in the establishment of a number of both formally authorised and unauthorised bach settlements. Such settlements can have significant effects on the natural, recreational and landscape values of the surrounding land. Community-based buildings are frequently located on recreation reserves. Some are associated with sports (such as golf and rugby) and others with community facilities (such as libraries, play centres and scout dens).

Commercial recreation and tourism on land managed by the Department includes a broad range of outdoor recreation businesses from relatively passive sightseeing trips to very active guided hunting, tramping, mountaineering and skiing. Canterbury is part of a wider South Island and nationwide visitor destination, and land managed by the Department offers a wide range of commercial recreation and tourism opportunities. The nature of each commercial operation varies considerably and ranges from major ski field developments to small, self-sufficient guided tramping concessions. Since the early 1970s, the range of commercial opportunities has expanded and commercial activities now operate over much of the Canterbury Southern Alps.

Each year the Conservancy administers about 100 commercial recreation concessions, and receives about 20 new applications. The tourist industry is dynamic, making it difficult to forecast new proposals arising over the CMS ten-year period.

Commercial recreation and tourism provide opportunities for people to participate in activities that they may not normally do (such as staying at education camps and lodges, and taking scenic flights, guided climbing and nature tours). These types of services are also beneficial for the safety of some visitors. For example, guided tramping or climbing offers people a chance to experience and enjoy protected natural areas in a controlled and safe manner. In most Canterbury instances, these are small-scale, low-impact operations.

Concessionaires are in a good position to impart a sense of environmental responsibility to their clients and ensure proper use of public facilities. They can advocate the conservation of natural and historic resources by providing clients with publications such as the *New Zealand Environmental and Water Care Codes*, and by teaching through practical experience.

While these activities produce substantial personal and commercial benefits, the capacity of the natural resource base to cope with increasing visitors will always be a limiting factor. Commercial recreation and tourism, like any other forms of recreation, have the potential to adversely affect natural resources and other visitors' experiences.

Part IIIB of the Conservation Act provides the requirements for considering, processing and managing concessions, and is the principle legislation for managing commercial recreation.

Prospecting, mining and quarrying are very minor on land managed by the Department in the Conservancy due to the lack of Crown minerals present and is not expected to increase in the medium term. Previous mining activities were mostly related to coal or sand mining; these are now less common.

Land managed by the Department is periodically used for New Zealand Defence and police activities. The Conservancy must consider all requests for the traditional Māori taking or use of protected plants and animals.

The permitting of taking rock, soil, plant and animal samples and specimens for non-commercial research, and for bioprospecting is addressed in 5.5.5 (Research).

Assessing Applications

Any request for use of land managed by the Department is governed by legislation, relevant management plans and this Conservation Management Strategy (CMS). Consultation with Conservation Boards, Ngāi Tahu, Fish and Game Councils and the public may form part of the process. A use may be authorised by a concession or other authority, depending on the nature of the activity.

The adverse effects of these uses can vary widely, as can their commercial nature. This means that each application must be assessed on its merits. Existing and proposed uses range from those with low impact, such as apiary sites, to high-impact uses such as some large-scale broadcasting and telecommunication facilities. Therefore, while all uses have some impact, they may be approved where they assist management, where natural and historic values are not compromised, and where they are consistent with the values for which the area is managed.

While the first consideration in assessing a proposal is its effect on the values being protected, the effect on other uses (including recreation) must also be considered.

Overall, the primary direction will be to only allow use of land and resources managed by the Department where it is consistent with the protection of natural and historic values and the status of the land. To ensure this, an evaluation of the impacts on values is essential. An environmental impact assessment (EIA) is required with applications, its detail dependent on the proposal. Major proposals may trigger an environmental impact report process (see 5.5.6 Environmental Protection). Any assessment will also need to address social impacts such as noise and crowding, and the following considerations must be included:

- The cumulative impact of these uses. For example, one hilltop with communication facilities may be less obtrusive, but several hilltops with similar facilities may have a much greater impact. Conversely, one large co-located structure or several individual structures on a hilltop may have greater impact than if those structures were dispersed throughout the landscape. Therefore each application needs to be assessed on its merits and the cumulative effect with other structures.
- Exclusive use: In general, exclusivity cannot be justified. It will only be adopted as policy where multiple use (i.e. more than one business being carried out in the same area) would have an adverse effect on natural and historic values or on public use and enjoyment. It may also apply to specific buildings and structures. Where a use is appropriate (e.g. grazing for management), competition for the use may be promoted through measures such as tendering, to ensure the Department earns a market rental.
- Alternatives: Consideration will be given to whether it is essential for the use to be established on land managed by the Department. The options for alternative sites need to be explored.
- Term of use: This can be crucial to the viability of a proposal, particularly where there is a large investment. Minimum-length terms will generally be sought – though the amount of capital outlay will be taken into account. Where long-term uses are sought, the provision of review periods will serve to protect the public interest.
- Revenue: Rentals need to be appropriately set, in accordance with the Conservation Act. Independent valuations will be considered in some instances. Periodic rent reviews are required.

Appropriate rentals will be required from concessionaires, and there will be an increasing requirement to monitor and mitigate the adverse effects of their enterprises. The Department will liaise with concessionaires to determine appropriate measures of mitigation.

Major issues associated with the commercial use of land managed by the Department include :

- future management of Selwyn huts
- authorising or removing unauthorised structures
- disposing of land with little natural, historic or recreational value
- *protecting fragile alpine areas from ad hoc encroachment of telecommunication installations*
- ensuring adequate environmental impact assessments (EIAs) are provided to assess the effects of proposals on natural, historic and recreational values and ensuring concessionaires avoid and minimise adverse effects
- the effects of visitor growth on natural, historic and recreational values
- review of the management and development of Aoraki/Mount Cook Village

5.4.2 Concessions General

- considering applications and managing concessions for commercial use of land managed by the Conservancy

Current Situation

Background

A concession means a lease, licence, permit or easement, as well as meaning the activity itself as authorised by a concession document.

The Conservation Amendment Act No. 2 came into force on 1 July 1996, creating provisions that apply to concessions under the Conservation, National Parks, Reserves and Wildlife Acts.

These provisions affect all concessions on lands managed by the Department, including recreation and tourism concessions, aircraft landings, commercial filming and resource use concessions such as grazing, telecommunication, harvesting and baches.

The Conservancy deals with various one-off proposals for other activities, visits by overseas guiding companies, and spasmodic activities by local companies. Applications for activities that were not predicted have also occurred, such as bungee jumping, rafting, and boating on the Tasman Glacier terminal lake. It is important that the Conservancy is able to consider all applications on their merits based on their adverse effects, the relevant statutory framework and within the scope of this CMS.

Individuals or organised groups taking part in a recreation activity, whether for the benefit of individuals or collectively, do not require a concession if they do not receive any specific gain or reward for that activity, whether monetary or otherwise. A group of this kind may charge its members a reasonable cost to recover expenses for organising the activity.

Concession applications

There are a number of issues relating to concession applications. The first is ensuring the decision-makers receive adequate information to be able to consider applications. The next step is to consider applications with regard to relevant legislation.

Information

Applicants must identify and provide information about the possible effects of their proposed activities, through an appropriately detailed environmental impact assessment (EIA). For major proposals an environmental impact report may be required (see 5.5.6 Environmental Protection).

The focus of the legislation is to require the identification of ways in which the adverse effects of activities can reasonably and practicably be avoided, remedied or mitigated. 'Effect' has the same meaning as in the Resource Management Act 1991.

The intention to grant a lease or licence must be publicly notified but there is discretion for notifying permits or easements.

Considerations

A number of matters must be considered (in accordance with section 17(U) of the Conservation Act) when deciding whether or not to approve an application.

The main considerations are related to the provisions of the Act or purposes for which the land is held and the effects or methods proposed to avoid, remedy or mitigate adverse effects.

Applicants seeking any concession granting an interest in land or an easement must provide additional information as there are a number of conditions to satisfy before such concessions will be granted.

These relate to the reasons for and appropriateness of the application. For example, an application to build a structure will not be granted if building it in another place would have fewer adverse effects.

Consultation with Ngāi Tahu on each concession application may be undertaken by the Conservancy as part of the Department's partnership obligations arising from section 4 of the Conservation Act.

Conditions

Conditions, rents and bonds can be included in concession documents.

If concession applications are successful there are a variety of conditions that can be imposed, including adequate monitoring and charging appropriate rentals.

There are also a number of situations in which rent, compensation or bonds can be reduced or waived. Concessionaires can be asked to provide copies of accounts so that rents, fees or royalties can be verified.

Grazing concessions generally have a maximum term of five years, and usually do not have to be publicly advertised. Concessions may be issued for up to 30 years, or up to 60 years in special circumstances.

Statutory Framework

In 1996, Parliament passed the Conservation Amendment Act, which changed the way the Department manages concessions. The Act amended four existing Acts affecting concessions:

- Conservation Act 1987
- Reserves Act 1977
- National Parks Act 1980
- Wildlife Act 1953

A single set of provisions now applies to concessions. These provisions appear only in the Conservation Act with cross-referencing to the other Acts.

The new provisions came into effect on 1 July 1996. They affect all concessions on lands managed by the Department, including resource use concessions such as grazing, telecommunications, baches and harvesting, recreation and tourism concessions, aircraft landings, and commercial filming activities.

Under section 17S(3) of the Conservation Act, the Department, acting under delegated authority from the Minister, may require concession applicants to prepare an environmental impact assessment (EIA) in the form set out in the Fourth Schedule of the Resource Management Act, or such other format as required.

Section 17S(1) of the Conservation Act places the onus on a concession applicant to provide adequate information on the effects of their proposed activity. The Department is responsible for assessing whether the applicant has met these requirements, that the applicant's predictions of effects are accurate, and that the applicant's proposed means of avoiding, remedying or mitigating adverse effects are appropriate.

Objectives

- To require information from applicants and others to enable the Department to adequately assess the effects of concession proposals.
- To consider applications for concession proposals and to grant them where reasonable and practicable measures can be taken to avoid, remedy or mitigate any adverse effects.

Implementation

The Conservancy will:

1. Require every application for a concession to include (but not be limited to):
 - a description of the proposed activity
 - a description identifying the places where the proposed activity will be carried out and indicating the status of such places (including reasons why the activity or structure cannot be placed off land managed by the Department)
 - a description of the potential effects of the proposed activity, and any actions that the applicant proposes to take to avoid, remedy or mitigate any adverse effects
 - details of the proposed type of concession for which the applicant is applying
 - a statement of the proposed duration of the concession and the reasons for the proposed duration
 - relevant information relating to the applicant, including any information relevant to the applicant's ability to carry out the proposed activity
2. Require applicants to supply further information as necessary to make an informed decision. This will include an environment impact assessment (EIA).

The Department may (at the expense of the applicant) commission a report or review, seek advice from other persons or obtain relevant information from any source, on matters relating to the application.

3. Consider applications, having regard (but not being limited) to:
 - the purposes for which the land is held
 - the availability of alternative locations for the proposed structure or activity
 - measures to avoid, remedy or mitigate adverse effects on natural values including (but not limited to):
 - indigenous vegetation
 - ecological associations
 - indigenous wildlife
 - indigenous invertebrates

- indigenous fish
 - landscape
 - landforms
 - geological features
 - soil sequences
 - natural quiet
 - natural darkness
 - measures to avoid, remedy or mitigate adverse effects on historic values including (but not limited to):
 - Māori historical sites and appropriate tikanga (custom)
 - European historical sites
 - measures to avoid, remedy or mitigate adverse effects on recreational values including (but not limited to):
 - hut use and capacity
 - track systems, both on and adjacent to affected track systems
 - public access
 - recreational opportunity settings, including noise levels and natural darkness and light
 - social settings of recreational use, including party size and interaction
 - existing users
 - public use and enjoyment of the area concerned
 - public safety
4. In accordance with section 17(U) of the Conservation Act have regard to the following (but not be limited to them), in considering any application for a concession:
- the nature of the activity and the type of structure or facility (if any) proposed
 - the effects of the activity, structure or facility
 - measures that can reasonably and practicably be undertaken to avoid, remedy or mitigate any adverse effects of the activity
 - information received by the Minister under section 17(S) of the Conservation Act
 - relevant environmental impact assessments, including any audit or review
 - relevant oral or written submissions received as a result of any relevant public notice issued under Section 49 of the Conservation Act
 - any relevant information that may be withheld from any person in accordance with the Official Information Act 1982 or the Privacy Act 1993.
- Reasons for declining applications may include (but are not limited to):
- the activity is contrary to the provisions of the Act governing the land or the purposes for which the land is held
 - there is insufficient or inadequate information to assess the effects of the intended activity, including any effects of the proposed methods to avoid, remedy or mitigate adverse effects
 - there are no adequate methods for remedying, avoiding or mitigating the adverse effects of the activity
 - the applicant cannot demonstrate the necessity for exclusive possession to protect public safety; to provide security for the activity site, structure or facility; or for the competent operation of the activity
 - the activity is inconsistent with this approved Conservation Management Strategy (CMS) or any relevant Conservation Management Plan (CMP). (Concessionaires must comply with the CMS or CMP even if the concession document allows, or appears to allow the concessionaire to do otherwise.)
5. Impose and enforce (where required) appropriate conditions in accordance with the Conservation Act. These may include (but are not limited to):
- the activity and where it can be carried out
 - the names and addresses of those who may carry out the activity
 - the payment of rent, fees and royalties
 - the payment of compensation for and remedying any adverse effects of the activity
 - the provision of bonds to cover costs of work required by the concession document but that the concessionaire failed to carry out; or to mitigate any adverse effects not authorised or not reasonably foreseen
 - the terms of waiving or reducing rent, compensation or bonds
 - the restoration of the site and removal of structures or facilities at the expense of the concessionaire, or the vesting of such facilities in the Crown, at the end of the concession term
 - periodic reviews of the terms and conditions (including rents) of the concessions
 - a covenant on any transfer, sublease, sublicence or assignment of a concession

- the payment of fees (including legal fees) related to preparing the concession document and its registration
 - the production and implementation of safety plans for each concession (where deemed appropriate these may be independently audited)
 - reporting all incidents or accidents to the Department of Conservation and the Occupational Safety and Health division of the Department of Labour.
6. Monitor concessions to ensure that concessionaires comply with requirements to remedy and mitigate adverse effects on natural and historic resources and recreation opportunities.
 7. Fix concession rents, fees or royalties at the appropriate value, having regard to:
 - any circumstances relating to the nature of the activity
 - the effects of the activity on the purposes of the area concerned
 - any contractual conditions, covenants or other encumbrances placed upon intrinsic, natural or historic resources by the concession
 8. Review rent, fees and royalties for each concession at least every three years.
 9. Seek cost-recovery for the processing of concessions, in accordance with sections 60A and 60B of the Conservation Act.
 10. Publicly offer concession opportunities, in accordance with the Conservation Act, by:
 - tendering the right to make an application
 - inviting applications; or
 - carrying out other actions that may encourage specific applications
 11. Include concession provisions for the concessionaire to carry out activities relating to the management of any conservation area on behalf of the Minister (if required).

Priorities

- Adopt an effects-based management regime of concessions.
- Enhance visitor experiences by providing opportunities for people to experience and enjoy protected natural areas in a controlled and safe manner.
- Implement full cost-recovery.
- Charge appropriate rentals for the privilege of using land managed by the Conservancy.
- Monitoring of concessions.

Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include:

- comprehensive monitoring of all concessions

5.4.2.1 Public Works

- Considering applications and managing concessions for appropriate public works and associated structures on land managed by the Conservancy.

Background

Most works, and the erection of structures formerly regarded as public works, are now carried out by commercial organisations such as ECNZ, power companies or network utilities such as Broadcast Communications Ltd and Telecom. Consent is often sought for buildings, structures or easements in connection with these works. Other significant public works are water or sewage treatment plants or pipelines, bridges, roads and major highways.

While national parks, reserves and conservation areas may have the potential to be used for such works (their availability is recognised in the Public Works Act), all relevant and technically feasible alternative sites should be assessed and discounted. The purposes for which land managed by the Department are held are generally not consistent with accommodating public works and structures. Where, however, it is impractical to locate a work elsewhere and there is an identified public good, then proposals can be considered.

In some instances the only available sites for public works such as water or sewage plants, pipelines or roads is on land managed by the Department. Proposals for use are carefully assessed to ensure that there is a justifiable need for the work and that there are no suitable alternative sites on private land. Applicants are required to address these points when submitting proposals to the Department. Proposals may require Resource Management Act consents, as well as those of the Department. Easements may be required (refer 5.4.2.2 Easements).

An appropriate environmental impact assessment (EIA) is required to evaluate the merits of a proposal against the values of the area concerned. Where impacts are unacceptable and cannot be avoided, remedied or mitigated, the application is generally declined.

Where land is required for a public work and it is inappropriate for the land to remain in a protected status (for example, where land is to be used for a sewage treatment plant or a road) then the land must be purchased for that work and compensation paid at the statutory value.

Where the work can be constructed without undue impact on natural and historic values, the occupation of land can be managed under a formal concession arrangement.

Roading proposals often present particular problems as road widening and new alignments may not be feasible on existing roads or private land. Further problems can arise in selecting storage sites and spoil dumps. New roads or alignments can sometimes provide places for picnic stops, improve access to areas managed by the Department and offer opportunities to protect the natural values of existing legal road. In all cases the public good must be weighed against the impacts of roading development on natural and historic values. The current Arthur's Pass National Park Management Plan sets out the guidelines for investigating and constructing roads through Arthur's Pass National Park.

Routine road maintenance may involve cutting vegetation, weed spraying, and the disposal of spoil from slips into watercourses. Some of these activities may have adverse effects on natural and historic values or arouse public concern even where areas managed by the Department are not affected. Close liaison is required with roading authorities to minimise these problems.

Statutory Framework

Part II of the Public Works Act 1981 allows parts of national parks, reserves and conservation areas to be taken for a public work with the Minister's consent. Compensation is payable under Part V of the Act.

Section 55 of the National Parks Act 1980 allows the Director-General of Conservation to permit the construction of a road in a national park.

Once a road is constructed, the area required for roading can then be set apart or excluded under section 8 and 11 of the National Parks Act. The operative Arthur's Pass National Park management plan (1995) has provision for the construction of a realigned SH73 through the park, where the environmental impacts can be adequately avoided, remedied, or mitigated.

Emergency activities for public works are provided for in section 330 of the Resource Management Act 1991. This allows for emergency works such as repairing roads damaged by storms. Such work may require retrospective consents. These activities require relevant Departmental approvals, in accordance with the Conservation Act.

Section 23 of the Electricity Act provides for access to existing transmission lines for the purposes of their maintenance and operation. This includes access by vehicles and for the trimming of vegetation under transmission lines for safety reasons. Such work will be permitted as it is vital in terms of maintaining the viability of the national grid.

Objective

- To consider applications for public works and associated structures and to grant them where no other practical site exists, or where the effects of the work can be remedied or mitigated, and the use, where practicable, is compatible with the purpose for which the land is held.

Implementation

The Conservancy will (see also 5.4.2 Concessions General):

1. Consider granting concessions, subject to conditions, for public works and associated structures where practical and technically feasible alternative sites are unavailable and adverse effects are minimal. A bond may be required.
2. Require the construction of all approved works to adhere to strict conditions of consent, aimed at minimising any adverse effects. Site restoration will generally be a condition of consent.
3. Require acquisition under the Public Works Act and compensation paid at the statutory value where it is inappropriate for land to remain under the Department's management (for example a road realignment).
4. Establish concessions at fixed terms for those works where the land remains managed by the Department (for example, sewage or water pipeline easements in recreation reserves). These concessions may require an annual fee and/or compensation payments.
5. Maintain close liaison with roading authorities over routine road maintenance adjacent to streams, rivers and areas managed by the Department to avoid, remedy or mitigate any adverse effects on natural, historic, or recreational values.
6. Liaise with relevant consent authorities, where any works require a resource consent application under the Resource Management Act, to seek consistency with information requirements.

Priorities

Primary

All concessions will be managed to avoid, remedy and mitigate the adverse effects of public works where they cannot be located on land of other tenure.

Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include:

- comprehensive monitoring of all public works

Table 32: Key Public Work Priorities

Theme	Issue	Method	Results Sought	Place
SH73 roading impacts	Impacts of SH73 reconstruction on Arthur's Pass National Park	1. Arthur's Pass National Park Plan Criteria and EIA. 2. S55 (National Parks Act) consents. 3. Gazette addition and removal of land from Arthur's Pass National Park.	Adverse effects of roading reconstruction avoided, remedied or mitigated	Waimakariri (Arthur's Pass National Park)

5.4.2.2 Easements

- considering applications and managing concessions for access to, or rights to convey services across, land managed by the Department.

Current Situation

The most common easements over land managed by the Department are for access, or for the right to convey water, gas, oil, sewage, electricity, and broadcast or telecommunication services.

Generally, easements may be granted where:

- a legitimate need for the grant exists and cannot be satisfied using land not managed by the Conservancy
- the adverse effects on natural and historic values can be avoided, remedied or mitigated
- it does not significantly restrict existing public use

The Conservancy may also negotiate easements over private land on the Crown's behalf. For instance, this may occur where the Conservancy seeks access over private land or when creating a walkway or other forms of foot access (see 5.5.2 Statutory Land Management).

The granting of easements in national parks, conservation areas and reserves must take into account the purposes for which the land is held. Public notification of an easement application may be required where the proposal is likely to significantly affect public use.

Land managed by the Department is usually rural, large in area and often contains major water catchments. Because these areas can sometimes enclose private land, there will always be demand for easements. Often the Department manages land on both sides of a river or stream in the form of a marginal strip or for reserve or stewardship land. The Conservancy has a responsibility to consider all easement applications over these areas and ensure that resulting decisions are soundly based. Access across marginal strips can often pose particular problems for network utilities as the strips can continue for significant distances and are not easy to avoid when establishing such infrastructure. Future management will need to ensure that activities within easements avoid, remedy or mitigate adverse effects on adjoining natural, historic or recreational values.

Through setting conditions on an easement, the Conservancy seeks to minimise adverse effects on the natural and historic values and existing users. Many applicants do not consider these values, and negotiations are then required to satisfy both parties. In cases of vehicle access, formation standards must be set and the responsibility for maintaining the access rests with the applicant.

Compensation or rentals are likely to be required for the granting of an easement. They should fairly reflect rights granted and be market-related. Independent valuers may be used in setting rentals.

Statutory Framework

Section 59A of the Reserves Act, section 17Q of the Conservation Act and section 49 of the National Parks Act allow the Department, under delegated authority from the Minister, to grant easements. Some Reserve Act and Conservation Act easements do not require public advertising where the adverse impacts are not significant.

Section 23 of the Electricity Act provides for access to existing transmission lines for the purposes of their maintenance and operation. This includes access by vehicles and trimming vegetation under transmission lines for safety reasons. Such work will be permitted as it is vital in terms of maintaining the viability of the national grid.

Objective

- To consider applications for easements and to grant and manage concessions where no other practical site exists, or where the effects of the easement can be avoided, remedied or mitigated, and the use, where practicable, is compatible with the purpose for which the land is held.

Implementation

The Conservancy will:

1. Consider granting easement applications where adverse effects on natural and historic values and public use can be avoided, remedied or mitigated and no practical alternatives exist off land managed by the Department. (see 5.4.2 Concessions General)
2. Require performance conditions for any construction work resulting from an approved easement. A bond may be required.
3. Safeguard natural and historic resources and public use of the area by seeking appropriate conditions.

4. Consent to easements over land vested in other administering bodies, provided that the effect on natural and historic resources or public use of the land can be significantly avoided, remedied or mitigated. Such easements may be subject to appropriate annual rentals and/or compensation payments.
5. Grant all easements for finite terms. Unless waived or reduced under section 17X(f) of the Conservation Act easements will be subject to the payment of market rental or royalty and may include the requirement for additional environmental compensation.
6. Manage existing easements to ensure that activities within the easement are compatible with the natural, historic or recreational values in the vicinity, as far as practicable.
7. Recover all costs of processing applications and managing concessions from the applicant; in accordance with the Conservation Act.

Priorities

The Conservancy will give priority to efficiently processing easement applications and ensuring that adequate conditions are imposed to protect natural, historic and recreational values.

Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include:

- comprehensive monitoring of all easements

5.4.2.3 Grazing

- Considering applications and managing concessions for grazing on land managed by the Department.

Current Situation

The Conservancy administers about 160 grazing concessions in Canterbury, involving a total area of 19,300 hectares; almost all are licences. More than 60 per cent of these adjoin riverbeds. A number of concessions are over reserves specifically set aside for soil and water conservation purposes to prevent riverbank erosion or to act as a buffer zone to protect adjoining farmland. Most of these concessions have been in place for many years.

The Department consults with Te Rūnanga o Ngāi Tahu when concessions are renewed or new proposals are investigated to ensure that traditional spiritual and cultural values are not compromised by the issue of a concession. The Department may also consult with the appropriate Conservation Board. A draft Grazing Policy (1991) produced by the Department, and the General Policy for national parks (National Parks and Reserves Authority, 1983) form the basis for administering grazing concessions.

The conditions for each type of concession are based on national guidelines, and in general only allow the grazing of sheep. Public access through grazing areas is generally protected, as are existing recreational rights of game shooters and anglers.

As well as generating revenue, grazing concessions have other benefits such as plant and animal pest control on concession areas and reduction of fire risks. Licences are presently managed on behalf of the Conservancy by Knight Frank (New Zealand) Ltd under a contract expiring in 1998. There is close liaison between Knight Frank (New Zealand) Ltd and the Department to ensure that protection of natural features continues.

There are several grazing areas that presently have little natural value. These blocks have ended up under the Department's management for various reasons. For example, five large farm blocks around the edge of Te Waihora/Lake Ellesmere were acquired for strategic wetland purposes. While the lake margins of these blocks undoubtedly have wetland values, the balance of the areas are valuable farmland and should be examined for disposal or exchange. Similarly, many small blocks adjoin or are indistinguishable from other farmland areas. These blocks should be looked at for exchange or disposal where costs make it economical.

Many reserves and conservation areas were farmed for many years prior to the establishment of the Department of Conservation. Marginal strips reserved from sale for public access, by section 58 of the Land Act 1948 were normally cleared and grazed with the adjoining farmland. The passage of the Conservation Amendment Act in 1991 required these areas to be managed for their natural and historic values as well as public access. Many of these areas are unfenced from the neighbouring properties and stock trespass is common.

The cost of fencing these legal boundaries is often prohibitive. Where natural and historic values are not a significant risk, fencing takes a low priority. Although grazing such land requires a concession or management agreement, little stock control is possible. Damage to adjoining bush can, however, be limited by restricting the grazing to sheep only. Cattle can cause serious degradation to waterways, freshwater fisheries and habitats, and marginal vegetation. Grazing concessions specifically state which animals may be grazed.

A concession can be cancelled or not renewed for a breach of conditions or where important natural or historic values are at risk, as provided for in the concessions. As this may have serious implications for the licensee who has built a farming practice around the use of this land, each cancellation is treated on a case-by-case basis, and is normally phased in over a reasonable period.

Cultivation on areas under grazing occupation can lead to degradation of natural or historic values and so is generally only permitted under special circumstances. It may be appropriate where the land is held under a long-term concession to assist recreation use or because the land area is too small for disposal.

Grazing concessions are preferable to disposal (see 5.5.2 Statutory Land Management) where the area:

- is necessary to retain public access or to provide facilities
- has potential for revegetation in the future
- has high costs for fencing along the boundaries
- has other management problems reduced by grazing
- is currently grazed without controls
- is impractical for disposal

- can contribute to riparian protection
 - has significant landscape or natural values that will not be adversely affected by grazing
- In other instances, land exchange or disposal is the preferable long-term option.

Unauthorised grazing is being progressively identified and either concessions are being issued or the grazing is terminated. In many cases grazing will continue until the boundary between freehold land and the area managed by the Department is fenced. Most of these areas have a low fencing priority. Many areas are too small to justify the cost of a concession and enforcement, and may remain grazed informally.

Statutory Framework

Sections 17Q of the Conservation Act, 49 of the National Parks Act and 74 of the Reserves Act allow the Department, under delegated authority from the Minister, to issue grazing concessions. The management of grazing in Arthur's Pass National Park and Aoraki/Mount Cook National Park is covered in their respective national park management plans.

Objectives

- To consider grazing applications and grant or re-issue and manage concessions only where grazing will have a positive or neutral effect on natural, historic and recreational values; and when all conditions have been fulfilled in the case of renewals.
- To dispose of grazing land where the natural, historic and recreational values are low or to exchange land where land of higher such values can be obtained.

Implementation

The Conservancy will:

1. Consider applications for grazing concessions on land managed by the Department, subject to conditions in accordance with the Conservation, National Parks and Reserves Acts as appropriate, where the issue of such a concession will:
 - not detrimentally affect the natural, historic or recreational values of the land
 - still allow for public access
 - enhance management for conservation purposes, such as fire and weed control
 - be consistent with the land status of the area

See also 5.4.2 Concessions General. The General Policy for National Parks also applies.
2. Consider longer or shorter term concessions than the general maximum of five years where the Department:
 - is using grazing as a management tool to better manage natural, historic or recreational features
 - considers that management will be better facilitated.
3. Discuss concession proposals with Te Rūnanga o Ngāi Tahu and conservation boards where appropriate.
4. Monitor some grazing concessions (where required) under the following arrangements:
 - the monitoring programme will be designed to meet departmental requirements for understanding trends in vegetation condition
 - monitoring will normally be undertaken at the concessionaire's expense
 - concessions may be inspected annually for compliance with conditions, and the effect of grazing on natural and historic values
5. Assess areas for new concessions, renewals or unauthorised uses to decide whether grazing is the most appropriate use of the land and whether additional conditions are necessary.
6. Base rentals for grazing concessions on current market value. In the case of an expired concession, grazing rights may be publicly tendered if the incumbent licensee is unwilling or unable to accept a market value.
7. Discount rentals from a market value where a licensee is prepared to undertake work or provide benefits to the Department, such as fencing. Section 17X(f) of the Conservation Act sets out the reasons for waiving or reducing rentals.
8. Impose on all concessions conditions designed to meet, maintain and enhance natural, historic and recreational values. Conditions may include (but are not limited to):
 - stock type
 - stocking rates
 - timing
 - monitoring
 - ensuring public access is maintained

- weed and pest control
 - fencing
9. Impose standard conditions on all grazing concessions to protect the land, including (but not limited to) bans on:
- spraying, burning, cutting or crushing indigenous vegetation
 - damage to natural, scenic, historic, archaeological, biological, geographical, or scientific features on the land
 - erection of buildings
 - exclusive possession or exclusive rights to or over land
 - roading and tracking
 - modification of waterways
10. Utilise the most efficient and economic methods to administer grazing concessions, including the contracting out of administration work.
11. Exchange land suitable for grazing for other land of high natural, historic, or recreational value or disposed of it where this is economically viable (see 5.5.2 Statutory Land Management).

Priorities

Primary

When a concession expires, those in significant natural areas such as national and conservation parks and reserves will be reviewed to assess their ongoing contribution to meeting management objectives. Grazing rentals of renewal concessions will be brought up to market values.

Secondary

Areas with little or no natural value will be disposed of where this action is economically viable for the Department.

Priority Sites and Actions

Reviewing grazing around wetlands, such as in reserves around Te Waihora/Lake Ellesmere.

Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include:

- disposing of many of the smaller areas of land managed by the Department that contain little or no natural features worthy of protection. Due, however, to legal administrative costs it may not always be economically viable to dispose of such areas
- comprehensive monitoring of all grazing concessions

Table 33: Key Grazing Priorities

Activity/Theme	Issue	Method	Result Sought	Place
Grazing	Wetland vegetation areas with important natural values	1. Fencing, controlling stock movement 2. Stock type and stocking rate 3. Land exchange	Wetland areas protected from uncontrolled and excess grazing	All places

5.4.2.4 Broadcast and Telecommunication Facilities

- considering applications and managing concessions for broadcast and telecommunication facilities on land managed by the Department in conjunction with providing for and managing the Department's own telecommunication facilities.

Current Situation

Background

Many of the foothill ranges and Southern Alps/Kā Tiritiri o te Moana in Canterbury provide potential opportunities for broadcast and telecommunication facilities.

Facilities currently occupy a range of sites from large BCL installations on isolated peaks such as Mount Grey/Maukatere, to smaller repeater and transmission sites in Arthur's Pass and Aoraki/Mount Cook national parks. Rain gauges and water-level recorders are installed in river catchments, with transmitters relaying information back to such as regional councils and ECNZ.

The Department has inherited a range of outdated and non-commercial agreements ranging from an exchange of letters to formal leases. However, the deregulation of the broadcast and telecommunications industry has raised new business opportunities for companies in this area. The Department is co-ordinating negotiations with several large companies for national agreements covering the use of sites in several conservancies. This will ensure a consistent approach is maintained and that the Department receives a fair market rental.

Modern communications systems are increasingly reliant upon wireless technology. Mountain tops and ridge-lines are attractive locations for broadcast and telecommunication facilities because of the need for 'line of sight' coverage. In many cases the siting of one facility at an elevated location will achieve the same coverage as several facilities situated at a lower elevation, and thus will minimise any potential cumulative environmental impact of structures in the landscape. It is important, however, that facilities located on highly visible mountains and ridges are sited and constructed to avoid, remedy or mitigate any potential adverse effects on the environment.

Commercial Sites

Deregulation of the broadcast and telecommunications industry has seen the arrival of a number of new companies. This, and the arrival of new technology such as cellular phones, has resulted in greater interest in locating transmission facilities on high altitude land managed by the Department.

Advances in satellite and ground-based technology will eventually allow some broadcast and telecommunication facilities to be located on private land at lower elevations. However, it is envisaged that there will be a continuing demand for new sites and co-location at existing sites.

It is important to ensure that provision of these and any future facilities will not compromise natural, historic or recreational values and that the true environmental costs associated with these activities are met by the operators. The public and commercial benefits these facilities bring are recognised, but must be weighed against the natural values of areas and the landscape in which the hilltop is often the dominant element.

Proposals for commercial applications will be assessed to ensure that any adverse effects on natural and historic values can be avoided, remedied or mitigated, if approved (see 5.5.6 Environmental Protection).

Departmental Sites

The Department operates and maintains both High Frequency (SSB) and Very High Frequency (E-band) radio broadcast and telecommunication networks to facilitate field operations and to provide an increased level of staff and public safety.

The present quality of radio communications within the Conservancy falls well below the ideal due to frequent atmospheric interference on the SSB band and the limited availability of channels on the E-band.

These factors regularly compromise the efficiency of field operations as well as public and staff safety.

With the intention of improving radio communications, the Department recently bought (from the Radio Frequency Service) 18 channels in the new Emergency Services (ES) band. As new hardware and resources become available, the Department will improve radio coverage dramatically by siting repeaters to link remote and rugged backcountry areas to the Department's area offices. Sites are currently being investigated in the Mackenzie Basin.

Co-location of Department and commercial facilities can be used to reduce adverse effects.

Statutory Framework

Section 59A of the Reserves Act, section 17Q of the Conservation Act, and section 49 of the National Parks Act permit the Department, under delegated authority from the Minister, to issue concessions for broadcast and telecommunication facility sites.

The Conservation, National Parks and Reserves Acts all provide the Department with the power to erect structures such as telecommunication facilities to assist the administration of land managed by the Department.

Objectives

- To consider applications for broadcast and telecommunication facilities on land managed by the Department and grant and manage concessions where the facilities cannot reasonably be sited elsewhere and where adverse effects on natural, landscape or historic resources and recreational values can be avoided, remedied or mitigated.
- To manage Department telecommunication facilities to avoid, remedy or mitigate adverse effects on natural, landscape or historic resources and recreational values.

Implementation

The Conservancy will:

1. Consider and grant applications for new broadcast and telecommunication facilities, subject to conditions, having regard to:
 - the effects on natural, historic and landscape values
 - the effects on the values of the appropriate rūnanga
 - minimising the visual impacts of the site
 - the opportunities to locate on land of other tenure
 - reasons why existing sites off land managed by the Department cannot be utilised
 - technical and operational requirements
 - the potential for weed and pest introduction
 - the purpose for which the land is managed(See also 5.4.2 Concessions General)
2. Require co-siting of new facilities where practicable, technically feasible and where the operations of co-sited facilities are compatible.
3. Not grant exclusive rights to utilise sites.
4. Require all sites to be kept in a clean and tidy state.
5. Require all concessionaires to avoid the introduction of weeds and pests.
6. Encourage existing concessionaires to minimise visual impacts or relocate to another more suitable site.
7. Allow the installation, maintenance and upgrading of existing broadcast and telecommunication facilities where it will not result in any significant visible changes to the existing structures. Any changes to structures or permitted uses will require the renegotiation of agreements in full.
8. Install Department telecommunication facilities, having regard to Implementations 1 and 2 above.

Priorities

The Conservancy will process applications for commercial broadcast and telecommunications facilities in accordance with the statutory requirements but will not encourage the use of Department land. The upgrading of Department facilities is a high priority.

Less Achievable Tasks

- Tasks the Conservancy may not be able to undertake or complete include the comprehensive monitoring of all broadcast and telecommunications facilities.

Key priority table not required.

5.4.2.5 Bee-keeping

- considering applications and managing concessions for the occupation and use by bee-keeping of land managed by the Department.

Current Situation

A commercially significant supply of pollen and nectar is available from some of the flowering plants on land managed by the Department. Currently, only one apiary concession exists in the Conservancy, utilising beech pollen.

Bees, beehives and bee-keeping activities could potentially have an adverse effect upon sensitive ecosystems, rare or endangered plants and animals, conservation management practices or recreational enjoyment. Competition by introduced bees with native birds and insects for the nectar or pollen of native plants has the potential to upset a natural ecological balance.

National *Guidelines for location of beehives on conservation lands* (1990) recognised that honey production and wintering-over beehives are generally compatible with the values for which the land is managed. Beehive production may provide a means of monitoring the health of flowering plants and the response of plants to possum control.

Statutory Framework

Section 17Q of the Conservation Act, section 49 of the National Parks Act and Section 59A of the Reserves Act permit the Department under delegated authority from the Minister to issue concessions for apiary sites.

Objective

- To consider applications for apiary sites and grant and manage concessions where they do not significantly impact on the purposes for which the land is held and the adverse effects on natural, historic or recreational values can be avoided, remedied or mitigated.

Implementation

The Conservancy will:

1. Identify and require owners of unauthorised hives on land managed by the Conservancy to apply for a beehive concession.
2. Consider the issuing of apiary concessions, subject to conditions, where:
 - there is no significant risk to threatened species
 - bee-keeping practices pose no increased risk of weed invasion or fire
 - management practices such as weed and animal control will not be inhibited
 - new access tracks will not be required
 - the sites are at least 100 metres from recreation facilities
 - the concession is consistent with the purpose for which the land is managed and the relevant Acts, policies, strategies and plans(See 5.4.2 Concessions General.)
3. Revoke concessions where there is evidence of adverse effects on native plants or animals. The hives will be removed at the owner's expense, where this is permitted in the concession.
4. Waive concession processing costs where the hives are used as a means of monitoring ecosystem health.

Priorities

All concessions will be managed to avoid, remedy and mitigate adverse effects on natural and historic values and generate market rents.

Less Achievable Tasks

As there is only one concession at present, the Conservancy does not expect any limitations to arise.

Key priority table not required.

5.4.2.6 Private Dwellings and Structures

- considering applications and managing concessions for private accommodation (baches and houses) and other structures on land managed by the Department

Current Situation

A *Draft policy: private baches on land administered by the Department of Conservation* was prepared in 1990. The policy aims to phase out use of land managed by the Department for private accommodation, and to make such areas available for public use and enjoyment. The policy precludes the construction of new baches and allows existing baches to continue where they have historic value, and the natural, historic and recreational values of the area are not affected.

The presence of private accommodation also conflicts with the public, open space use provisions of the Reserves Act relating to recreation reserves.

Generally, there is no reason why private buildings or structures (such as boatsheds) should be situated on land managed by the Department. Exceptions exist in the case of inherited (leased) occupancies. The presence of baches has both positive and negative aspects. The positive aspects can be the distinctive, practical and amateur style of the buildings, representing a phase in the development of New Zealand. They can also be part of the landscape character of some locations. Bach owners generally have an affinity with the environment surrounding their baches. They sometimes contribute to search and rescue operations and discourage vandalism. The baches also provide a facility (albeit exclusive) for owners and invitees to experience the natural environment.

However, baches can have an adverse effect on the environment, and on other users' enjoyment of the immediate area. The presence of buildings, changes to vegetation and landforms, and the effect of sometimes inadequate rubbish and sewage disposal methods detract from the natural character. The public are also often reluctant to make use of areas near baches for recreation. In many cases lease conditions restricting the periods of occupation of, size of, additions or alterations to, and maintenance of baches have not been enforced over the years. This has resulted in the baches becoming a more prominent feature in the natural landscape.

The Conservancy recognises bach owners' historical use of some departmental areas, but increasing recreational and environmental pressure requires the gradual withdrawal of private accommodation from lands managed by the Department.

There are three authorised bach settlements in Canterbury on land managed by the Department, one close to Te Waihora/Lake Ellesmere – Lower Selwyn (58 sites) and two at Lake Alexandrina (Takamoana) (approx 110 sites).

The Lower Selwyn sites are held on nine-year leases expiring in June 1999, and are generally used by game shooters and fishers. These hut owners have expressed a wish to freehold their sites. The hut area is periodically flooded by high lake levels. The Department anticipates higher average lake levels in association with the Lake Ellesmere Water Conservation Order, and as a consequence of predicted sea level rise. These predictions mean the Lower Selwyn area may not be suitable for a permanent hut settlement.

At Lake Alexandrina (Takamoana) two Reserves for Fishing Purposes accommodate baches and holiday homes primarily used by anglers. Administration of these reserves recently passed from the Central South Island Fish and Game Council to the Department. While the settlements are considered to be authorised, none of the baches holds a concession. It is proposed to re-gazette the reserves Local Purpose Hut Settlements with building design and use guidelines in place under the Reserves Act and/or the Resource Management Act processes.

A number of other baches, huts and boatsheds have been situated on land managed by the Department, many without formal consent from the Crown. These sites occur at Loch Katrine (60 baches), Lake Pearson (4), Lake Heron (9), Lake Ōhau (6?) and Pareora River (6). Some of these sites have been occupied for more than 30 years.

Statutory Framework

Part IIIB of the Conservation Act 1987 allows the Department, under delegated authority from the Minister, to issue concessions for the occupation of land managed by the Department.

Objectives

- To reduce the number of existing private bach sites, ensure no new private baches are established, and
- remove unauthorised buildings from land managed by the Department
- To clarify the ongoing administration of authorised bach settlements
- To consider applications for private bach sites and grant concessions where the activity cannot reasonably be sited elsewhere and where adverse effects on natural, landscape or historic resources and recreational values can be avoided, remedied or mitigated.

Implementation

The Conservancy will:

1. Generally not permit any new private baches on land managed by the Department. Approval to rebuild and/or alter any buildings may be granted only to existing licensed baches provided local authority requirements are met.
2. Manage existing concessions for baches located on land managed by the Department in terms of those concessions. Market value for bach sites will be determined to fairly reflect the use of public land for private purposes.
3. Investigate the future status and tenure of the Lower Selwyn huts.
4. Action reserve re-classification and concession applications for the Lake Alexandrina huts reserves huts, in accordance with developed hut settlement management guidelines.
5. Renew or grant concessions for existing baches not covered by Implementations 3, 4 or 5 above only where the building's historic or recreational values outweigh its adverse impact on natural and historic resources and recreational values and other alternative uses of the site.
6. Identify and remove unauthorised structures from lands managed by the Department.
7. Remove unauthorised baches by demolition, relocation, fixed-term tenancies or other appropriate methods.
8. Complete and implement the Loch Katrine Recreation Reserve Management Plan draft (1993) as it relates to the unauthorised huts.

Priorities

The Department will investigate the future status and tenure of the Lower Selwyn hut settlement. This will involve liaison with hut owners, North Canterbury Fish and Game Council, Selwyn District Council, Canterbury Regional Council, Ngāi Tahu and other interested groups.

The Lake Alexandrina reserve classification and management guidelines will be actioned.

The Loch Katrine Recreation Reserve Management Plan will be implemented.

Less Achievable Tasks

Due to administrative costs, it may not be viable to remove some of the smaller unauthorised occupations.

Table 34: Key Private Dwellings and Structures Priorities

Name	Issue	Method	Results Sought	Place
Loch Katrine baches	Unlicensed bach occupation of Loch Katrine Recreation Reserve	Implement Loch Katrine Recreation Reserve Management Plan	1. Protection of remote character of the area. 2. Uses compatible with recreation reserve status	Hurunui
Lower Selwyn Huts settlement	1. Future of settlement 2. Tenure 3. Waste disposal	1. Relocation 2. Lease 3. Waste management system	Reduced conservancy involvement in hut settlement	Plains
Lake Alexandrina bach settlements	1. Lack of concessions 2. Lack of management guidelines	1. Reserve re-classification 2. Concessions 3. Guidelines	Fully authorised and well-managed settlements	Waitaki

5.4.2.7 Accommodation

- considering applications and managing concessions for community club, education and commercial accommodation

Current Situation

The Conservancy presently manages 20 accommodation agreements, subject to varied terms and conditions, for several quite distinct purposes. Aoraki/Mount Cook Village has large-scale tourism accommodation, including shop and staff facilities. Club lodges are situated primarily in Aoraki/Mount Cook and Arthur's Pass National Parks, and the Craigieburn Conservation Park. There are several education camps and lodges situated in the Arthur's Pass and Hanmer areas. A concessionaire owns and maintains a private alpine hut, which incorporates a small public shelter, in Aoraki/Mount Cook National Park.

The Department wants to encourage the location of such facilities outside, rather than within, land managed by the Department, except where the activity or service is site-dependent. For instance, the *Mount Cook National Park Management Plan* (1989) recognises the importance of the village as a tourist destination and promotes management of the village as an amenity area. For details on the Aoraki/Mount Cook Village policies refer to the above plan.

Elsewhere, any development of accommodation will have to be assessed critically against the criteria of impacts on natural and historic resources, requirements of tikanga Māori, recreational importance, and the existence of alternative opportunities. Facilities requiring exclusive site occupancy are more appropriately located off land managed by the Department.

Most existing facilities predate protected area gazettals. Consequently, some agreements are 'at the pleasure of the Department' (site occupation is usually rent-free and not for a fixed period). Others pay either ground rentals or very modest concession rentals. To honour existing rights it is desirable that more formal concessions be arranged. Concession rentals should reflect the privilege of such site occupancy and the ways in which facilities are used. The Conservancy supports club facilities remaining, but considers that they should be formally authorised (some currently are not), and should be charged an appropriate rental as well as cost-recovery fees.

Statutory Framework

The Department, acting under delegated authority from the Minister, can authorise appropriate accommodation facilities according to the provisions of the National Parks, Reserves and Conservation Acts, in accordance with Part IIIB of the Conservation Act. Some facilities may require other authorisation as they comply with section 170(4) of the Conservation Act. Environmental, public health and safety requirements also apply to these facilities, under the Resource Management, Occupational Safety and Health, and Building Acts.

Objective

- To consider applications for club, education and public accommodation and community and sporting facilities and grant and manage concessions where reasonable and practicable measures can avoid, remedy or mitigate any adverse effects, and where the activity cannot reasonably be located off land managed by the Department.

Implementation

The Conservancy will:

1. Consider applications for accommodation having regard to (but not limited to):
 - susceptibility to erosion and trampling
 - drainage and run-off of the site and surrounds
 - geological stability and safety, with respect to avalanche rock fall, flood hazard, wind and snow conditions of the proposed site
 - the need for and likely use level of the proposed structure
 - visual impact
 - the impact the likely resulting increase in use will have on natural values
 - availability of a water supply
 - acceptability of toilet, grey water, and other waste treatment proposals
 - availability of the facility to the general public
 - impacts on the Department's recreation facilities

- a clear and sustainable benefit to the quality of recreational facilities in the Conservancy
 - land status
 - relevant Acts, policies, strategies and plans
- (See 5.4.2 Concessions General.)
2. Impose conditions as deemed appropriate. These may include (but are not limited to) requiring that buildings:
 - are well maintained (inside and out)
 - have surroundings kept in a clean and sanitary condition
 - have adequate sewage disposal
 - have an adequate refuse disposal system which will dispose of refuse outside land managed by the Conservancy
 - provide appropriate low-polluting cooking, heating and lighting systems
 - are not modified or added to except with the approval of the Conservancy
 - have heating and cooking facilities generally not reliant on wood
 - have an approved water supply
 - have appropriate fire-fighting equipment
 - are painted externally in an approved colour scheme
 - provide for public access
 3. Consider applications to undertake essential upgrading and replacement of existing accommodation facilities. Reasonable consideration will be given to requests for replacement of facilities destroyed by fire or natural hazards, having regard to the criteria in Implementation 1.
 4. Consider applications for extensions to facilities, with regard to (but not limited to):
 - demand
 - impacts on native vegetation and animals and geological features
 - implications for environmental effects
 - landscape impacts
 - geological stability and safety with respect to any natural hazard that the existing facility or proposed extension would be exposed to
 - criteria in Implementation 1
 5. Charge appropriate market rentals for all accommodation facility concessions, subject to section 17X(f) and 17O(4) of the Conservation Act (ability to waive or reduce rentals).

Priorities

The priority consideration for the Department when considering accommodation applications is to enhance the quality of recreation opportunities and to avoid, remedy and mitigate adverse effects.

The Department will seek to review all existing concessions. It will also ensure that any occupation of land managed by the Department (whether commercial or non-commercial) avoids, remedies or mitigates adverse effects, and that an appropriate rental is set.

Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include the comprehensive monitoring of all accommodation concessions.

Table 35: Key Accommodation Priorities

Theme	Issue	Method	Result Sought	Place
Accommodation facilities	Localised impact of facilities	1. Criteria, conditions monitoring 2. Put in place formal agreements where they do not currently exist 3. Appropriate rentals will be set for the privilege of occupying the site	Local environment protected	All places
Commercial/private huts in Craigieburn Conservation park	Unlicensed accommodation	Issue licences for huts that meet implementation criteria	1. Facility use regulated in the park 2. Protection of the environment	Waimakariri
Commercial accommodation at Aoraki/Mount Cook Village	Expansion of accommodation likely as a result of the development review	1. Prepare a development plan 2. Review the management plan	Facilities meet planning and commercial criteria	Waitaki

5.4.2.8 Ski Areas

- considering applications and managing concessions for ski areas

Current Situation

Ski areas refer to commercial ski fields operated by clubs or companies, be they downhill, cross-country or Nordic, as well as their associated facilities

Eight ski fields exist on lands managed by the Department in Canterbury; four operated by ski field companies and the remaining four by ski clubs:

Company Operated	Ski Club Operated
Mount Hutt	Temple Basin (two clubs)
Porter Heights	Craigieburn
Mount Dobson	Broken River
Ohau	Awakino

Another ski field (Tekapo) exists but is not currently operational. The lease is still held, pending a decision on its future.

Ski fields provide significant opportunities for outdoor recreation in Canterbury. Nearly all ski fields in Canterbury are in areas of high recreation value and low or moderate natural value. Terrain modification has occurred on some fields in order to provide services such as road access, accommodation, parking, ski tows, administration, ski hire, safety services and groomed ski runs.

Proposals to establish commercial cross-country or Nordic ski areas are a possibility in Canterbury, with a number of areas having ideal terrain for this type of skiing. Such proposals usually involve fewer facilities than traditional ski areas, and therefore have less potential for adverse effects.

Statutory Framework

The Department, acting under delegated authority from the Minister, manages ski field concessions under provisions of the National Parks, Reserves and Conservation Acts, in accordance with Part IIIB of the Conservation Act.

Objective

- To consider applications for developments on existing and new ski fields, and grant and manage concessions where reasonable and practicable measures can avoid, remedy or mitigate their adverse effects, and where they cannot reasonably be undertaken off land managed by the Department.

Implementation

The Conservancy will:

1. Consider applications for new ski areas or major extensions to existing fields, having regard to (but not limited to):
 - ability to minimise, avoid or remedy the adverse effects of skifield, tow and facility development, including associated roading, facility, and waste treatment
 - the availability of alternative locations
 - the financial ability of the developer to meet acceptable standards and levels of development
 - the ability of operator to manage natural hazards and public safety issues
 - the status of the land(See 5.4.2 Concessions General.)
2. Impose conditions as deemed appropriate; in addition to requiring an appropriate bond and the implementation methods set out below.
3. Require an operational plan providing guidelines for the development and management of each ski field, supplied by the concessionaire for departmental appraisal, subject to existing concessions. The operational plan will form the basis for approval of ski field operations and related developments. The plan will include the following:
 - an indicative development plan
 - an inventory of all facilities (such as lifts, servicing lines, power, communication, toilets and lodges)
 - an assessment of the relationships between facilities and public use

- the identification of areas of high natural value and details of how they will be protected
- the identification of the visually important components of the area that would need to be considered in landscape design
- a contingency plan in the event of a fuel spill (where relevant)
- an outline of restoration plantings of local native species where appropriate
- the identification of methods to minimise kea disturbance
- the identification of natural, historic and recreational interpretation opportunities to be provided by the concessionaire, or jointly developed with the Department.

The operational plans will be reviewed every five years. This will be a requirement for all new and existing concessions.

4. Require the preparation of an annual summer works programme (including clean-up) each spring for discussion and approval by the Department.
5. Require concessionaires to prepare and review safety plans, including a snow safety programme, subject to existing concessions. This will be a requirement for all existing and new concessions and must be consistent with *A guide to producing a ski area management safety strategy* (New Zealand Mountain Safety Council 1996), or other ski area industry standards. Any snow safety programme must be prepared and implemented by the concessionaire, after consultation with the New Zealand Mountain Safety Council. All plans will be required to set out strict precautions regarding public safety and environmental impact. The Department may employ appropriate external experts to audit safety plans.
6. Undertake regular monitoring on a cost-recovery basis, of ski area operations and work programmes, seeking compliance with concession conditions and safety and environmental standards.
7. Consider applications for terrain modification where the effects are minor and required to operate the ski area safely under normal snow conditions, subject to any concession, Part IIIB of the Conservation Act, and having regard (but not limited) to:
 - the provisions of existing CMPs
 - reasonable prior notice by the concessionaire
 - the current concession
 - the provision of detailed earthwork drawings
 - adverse effects of the works on natural, landscape and historic values and how they will be mitigated
 - skier safety enhancement
 - the provision of a wider range of trails or improved circulation
 - restoration of local indigenous plant species (where applicable)
 (See 5.4.2 Concessions General.)
8. Require all ski area buildings to maintain adequate water, waste disposal and other amenity systems, appropriate to the physical location, extent of use, land status, and adverse effects. Electricity or other clean fuels are favoured over fossil fuels.
9. Consider applications for using snow-making technology, including additives, where operational needs can be demonstrated and the concessionaire can establish that the technology will have minimal impacts on native vegetation and freshwater ecosystems. Relevant conditions may be sought in any RMA discharge permit for snow additives and, to protect alpine freshwater ecosystems, in any relevant RMA water permit (see 5.4.2 Concessions General).
10. Consider, subject to existing concessions and CMPs, applications for new or existing accommodation facilities on ski areas. Implementation 1 of this section and CMS 5.4.2.7 (Accommodation) will apply. Both ski club lodges and ski company staff accommodation facilities may be able to be replaced in the event of loss through fire or other disaster, or upgraded to meet building, health and visual standards. Extensions to existing lodges or accommodation facilities will have to be justified by clearly demonstrated increases in use. (See 5.4.2.7 Accommodation).
11. Require an environmental impact assessment (EIA) for any proposals to use salt or other chemicals for managing access roads or other purposes (see 5.4.2 Concessions General).
12. Establish a system of regular liaison with ski industry groups, including the Canterbury Ski Association, to share information and assist in improving overall standards of management and service.

Priorities

Primary

Ensure concessions are established for all ski areas occupying land managed by the Conservancy. Concessions will include environmental protection conditions and market rentals appropriate to the type of ski area.

Improve monitoring of ski area operations and developments, including the introduction of indicative development planning systems and operator-funded monitoring programmes.

Develop interpretation opportunities with concessionaires.

Less Achievable Tasks

Given the number and scale of ski areas in Canterbury, the Conservancy expects very few constraints on departmental management of these areas.

Table 36: Key Ski Area Priorities

Name	Issues	Methods	Results Sought	Place
Major ski area concessions	Approvals, monitoring and review	1. Regular inspections 2. Concession conditions 3. Manager and user liaison	1. Protection of natural and historic resources 2. Efficient and safe ski field management 3. Market rentals 4. Interpretation	Waimakariri (Craigieburn Range, Porter Heights, Temple Basin) Rangitata (Mount Hutt)

5.4.2.9 Aircraft

- dealing with aircraft activities that require a concession in accordance with section 17ZF of the Conservation Act 1987 – these are activities generally associated with recreation/tourism, such as the positioning of recreationists, heli-skiing, heli-hiking and scenic landings

Current Situation

Background

The spectacular alpine scenery of the Southern Alps/Kā Tiritiri o te Moana and, in particular, the Aoraki/Mount Cook and Westland/Tai Poutini national Parks is a major focus for local and international visitors to the South Island. The benefits of aircraft access are often not fully appreciated. Aircraft can provide quick and convenient transport, allowing visitors to access areas for many different recreational activities. The ready availability of aircraft combined with the smaller amounts of disposable time also contribute to air activity.

While the Department recognises the benefits that aircraft can have in allowing visitors to better appreciate or gain easier access to areas; it also recognises that the effects of aircraft can significantly impact upon the values of the land that the Department is charged to protect. Examples of such effects are: disturbance to wildlife; physical impacts at particular sites; impacts on historical and/or cultural values; the disruption of natural quiet and the values of solitude, space, scenic and other intrinsic values; effects on the enjoyment, inspiration, recreation and other benefits that visitors gain from land managed by the Department. Furthermore, allowing aircraft to position people in areas traditionally accessed by foot, may also impact on the 'recreational character' (a value in its own right) of those areas.

The principal effect of aircraft activity is the impact they have on the value of natural quiet. The Department's *Visitor Strategy* (1996) refers to natural quiet as '...the natural ambient conditions or the sound of nature'. Natural quiet is an important component of visitors' appreciation of lands managed by the Department. In protecting natural quiet, visitors and the tourism industry need to be aware of their responsibilities to other visitors. In particular, aircraft flying over areas managed by the Department require careful management to ensure that aircraft noise does not detract unduly from visitors' experience of those areas. The Civil Aviation Act 1990 makes provision for restrictions to be imposed on airspace for reasons of national security and the public interest. The Act allows the opportunity for the Department and other parties to seek restrictions on the use of airspace, for conservation purposes, including the enjoyment of visitors (*Visitor Strategy*, 1996).

At present many of the aircraft that the industry operates, particularly fixed-wing aircraft like the Cessnas and Pilatus Porter, are older and noisier aircraft. As this technology requires replacement, the industry needs to be aware that the Department will seek and, if necessary, enforce through conditions in concessions, the adoption of quieter technologies that will have less effect on natural quiet and other values that the land may contain.

It will become increasingly important for the aviation industry to take responsibility for its effects and to work actively with the Department, the Civil Aviation Authority (CAA) and interest groups if we are to avoid the experiences of the Grand Canyon National Park in the United States. This is particularly so in the glacier region, which includes Aoraki/Mount Cook National Park, and to manage the effects of aircraft flights over areas that are significantly affected or may in the future be significantly affected, by aircraft activities (something the Department has no statutory responsibility for).

There is an inherent conflict between the effects of aircraft and protecting the values of lands managed by the Department. In some areas that the Department manages this conflict has become acute. Because of this the Department will closely examine any new proposal for aircraft activities on land it manages. In this regard, it is the applicants' responsibility to demonstrate that the effects of their activity do not conflict with the values of the land or the reason why the land is managed; and that the effects can be adequately avoided, remedied or mitigated.

Applications for aircraft activities on land managed by the Department will be required to include environmental impact assessments (EIAs) that evaluate the potential adverse effects on natural, cultural, historical, recreational and any other values that a particular area may have. Close attention will be given to avoiding the adverse effects of aircraft in areas valued for their natural quiet. (see 5.4.2 Concessions General).

Developing robust methods for monitoring the effects of aircraft will aid the Department in formulating and implementing acceptable levels of impact.

Aircraft Landings and Operations

The areas in and around Aoraki/Mount Cook National Park (AMCNP) are the focus for the bulk of this conservancy's aircraft issues. The use of aircraft in the Aoraki/Mount Cook area is now an accepted use for scenic flying/landing, the positioning of climbers, ski tourers and other recreationists. Within the glacier region approximately 70,000 people per year take some form of scenic flight with about half of these flights originating outside AMCNP.

Aoraki/Mount Cook National Park presently has only one resident aircraft operator, the Mount Cook Airline Limited, based inside the park. The Mount Cook Airline Limited has a well-developed airport that caters for ski-planes and helicopters as well as main trunk flights. A number of operators based outside the park have concessions to make regular landings on land managed by the Department around the periphery of the national park. At Aoraki/Mount Cook there is frequent all-year-round use of aircraft for positioning of recreationists: climbers (November to April), glacier and heli-skiers (June to October), and ski tourers (September to November). This is currently permitted through existing contracts and a 'one-off' permit system which is very onerous on staff time.

Interest has grown steadily for new helicopter sightseeing, heli-skiing, heli-hiking and scenic snow landings in Aoraki/Mount Cook National Park and the Ruataniwha Conservation Area (Ben Ohau). Aircraft access in this area is an established use. However, there are no concessions for irregular or regular helicopters landings (other than heli-skiing) within the park, although a process is currently under way to consider this issue and implement the provisions of the *Mount Cook National Park Management Plan* (1989). The introduction of helicopters into Aoraki/Mount Cook National Park may require the establishment of a heliport. As stated earlier, the Mount Cook Airline Limited has a concession to operate an airport in the national park. Other concessionaires will either require the permission of Mount Cook Airline Limited to operate from this area or will have to seek a new heliport facility.

Scenic flights and landings and the positioning of recreationists on other lands outside AMCNP are mostly infrequent or seasonal. Heli-skiing occurs in the Arrowsmith, Mount Hutt, Ben Ohau and Two Thumb ranges. Interest in this activity has also been expressed for land managed by the Department adjacent to the Amuri Skifield in North Canterbury.

The aircraft industry has also expressed interest in obtaining the necessary concessions for positioning visitors and recreationists, such as hunters and fishers, on an irregular basis (as demand requires) throughout areas of the Conservancy.

A Management Framework

Some areas of land have higher values than others, for ecological, recreational, cultural, scenic, historic, scientific and many other reasons. This is often reflected by the legislative framework the land is protected and managed under (i.e. the National Parks, Conservation or Reserves Acts).

Based on the legislative framework, the values of the land and the reasons why the land is managed, land managed by the Department in Canterbury can be divided into three categories. At one end of the spectrum are the areas of land that have the highest level of protection and very high natural quiet values. Examples include the Hooker Valley in Aoraki/Mount Cook National Park and much of Arthur's Pass National Park. At the other end of the spectrum are the areas that have a lower level of protection and low natural quiet and other values that will not be significantly impacted on. Examples of this include areas on the Liebig Range where frequent aircraft activity has existed for some time. Other areas that could require careful evaluation are those that have a high level of protection and high intrinsic values but that are already subject to regular overflights and or long-term landing rights e.g. Tasman Valley in Aoraki/Mount Cook National Park.

The above approach would lead to three land categories, being:

- **Restricted Use Areas**

These would generally include all of the national parks, most reserves, and ecological and wilderness areas. Many of these areas are preserved in perpetuity for very specific reasons, which are often in the national interest. These reasons reflect the values of these areas: intrinsic, ecological, social, cultural, historical, archaeological, scenic, scientific, recreational, inspirational and wilderness qualities. Included in this category would be areas of land managed by the Department that have high wildlife value, and recreational hunting areas. The effects of aircraft would be detrimental to the maintenance of the values, including natural quiet, in these areas. Only occasional landings would be permitted in these areas.

- **Controlled Use Areas**

These would be areas where occasional or irregular aircraft activities may not significantly affect the values of the land. Natural quiet would dominate for 90 per cent of the time on a fine day. Periodic aircraft landings and associated noise could be permitted subject to adverse effects on natural and recreational values being avoided, remedied or mitigated. Irregular or occasional landings could generally be permitted through appropriate concessions and conditions.

Regular landing would not generally be permitted in these areas. However, in some sites on a case-by-case basis an exception could be made where the applicant could demonstrate that the effects of any proposal can adequately be avoided, remedied or mitigated. Some ski areas may be examples of such exceptions.

- **Frequent Use Areas**

These would be areas where, for various reasons, natural quiet values are low and where the effects of regular aircraft activities could be adequately avoided, remedied or mitigated. Aircraft activities and associated noise would be frequent in fine weather, consequently a low chance of experiencing natural quiet would be expected. Regular, irregular and occasional landings would generally be permitted through concessions, subject to effects being avoided, remedied or mitigated. Landings in these areas may still be subject to restrictions.

Statutory Framework

The Department, acting under delegated authority from the Minister, manages aircraft landing concessions under provisions of the National Parks, Reserves and Conservation Acts, in accordance with Part IIIB of the Conservation Act (in particular section 17ZF). All aircraft require a concession to land on or take off from areas managed by the Department, other than for search and rescue, Wild Animal Control Act activity, Department management, emergencies, or maritime navigational aid management. The term 'landing' is defined in section 17ZF of the Conservation Act to include 'the hovering of aircraft and the setting down or taking on of goods or persons from the aircraft.'

The Department only manages the effects that result from aircraft activities when they occur on land it manages. There is a clear distinction between the Department's responsibilities as a land manager, and the Civil Aviation Authority's responsibilities for aircraft and passenger safety and the regulation of flight operations, including overflights and flight paths.

District Councils can also control aircraft landing sites and noise through Resource Management Act land use rules in district plans. This control can apply to all lands, including those managed by the Department, but does not apply to Crown activities.

Objectives

- To manage aircraft access to ensure that other recreation opportunities are maintained and conflicts with other visitors are minimised.
- To consider applications for a range of aircraft activities, including buildings and land modification for aircraft facilities and grant and manage concessions where the effects of the activity can be avoided, remedied or mitigated, and the activity is compatible with the purpose for which the land is held.
- To liaise with the Civil Aviation Authority, aviation operators, recreationists, and local and regional authorities to advocate for the appropriate management of aircraft effects and to maintain the values of land managed by the Department.

Implementation

The Conservancy will:

1. Consider applications for aircraft landing concessions, having regard to (but not limited by):
 - relevant Acts, policies, strategies and plans
 - the values of the area, the reasons the land is managed, including recreation opportunities (see 5.3.2 Recreation Opportunities) and natural quiet
 - the adverse effects of aircraft on these values and measures to avoid, remedy or mitigate any effects
 - implementation criteria in 5.4.2 (Concessions General)
 - aircraft that have lower noise levels and a lower requirement for support infrastructure
 - the location of landing sites and facilities off land managed by the Department.

2. Manage and authorise aircraft landings into three general types of activity according to their frequency:
 - Regular: Frequent landings on all-year-round or seasonal basis. This principally provides for tourist snow landings at specific sites. Heli-skiing occurs at various locations throughout the Conservancy but is naturally restricted to seasonal periods when most other activities in this terrain are infrequent.
 - Irregular: Landings according to an irregular timetable and for a variety of possible sites (for example, on an as-required basis). This provides for landings for air charter purposes such as positioning recreationists.
 - Occasional: One-off landings for specific purposes at specific sites.
3. Apply the air access provisions as set out in Table 37 following:

Table 37: Aircraft Landing Management Areas

Location	Description	Status	Management Actions
Godley, Hooker, Mueller, Aoraki/Mount Cook Village	All those parts of Aoraki/Mount Cook National Park in the Godley catchment, the Hooker and Mueller Valleys (except for existing concessions)	National Park	Restricted Use Areas. <i>Occasional landing only as per the Himalayan thar control plan (1993) and the Mount Cook National Park management plan (1989). Overflight restrictions may be sought.</i>
Arthur's Pass	<i>All of Arthur's Pass National Park (as per the Arthur's Pass National Park management plan 1995).</i>	National Park	Restricted Use Areas <i>Occasional landings (in exceptional circumstances), as per the Arthur's Pass National Park Management Plan (1995)</i>
Proposed Adams Wilderness Area	That area defined in Map 10 of this document (see 4.8.6 Upper Rangitata/Rakaia)	Conservation Area	Restricted Use Area <i>This area is managed for wilderness values that are not compatible with the effects of aircraft, Wilderness Policy (1983) will apply, overflight restrictions may be sought.</i>
All places	Ecological areas gazetted under the Conservation Act 1987 and Reserves managed under the Reserves Act 1977 (i.e., nature, scientific, historic, scenic recreation and wildlife management)	Ecological Areas & Reserves	Restricted Use Area Areas protected for their ecological intrinsic, wildlife and natural quiet values. Occasional landings may be permitted.
All places	Coastal wetlands of national and international significance	Conservation Area Reserves	Restricted Use Areas These areas have protection of wildlife values as a main objective. Occasional landings may be permitted
All places	Other land managed by the Department not identified in the 'restricted or frequent use areas' that are managed under the Conservation Act 1987 or Reserves Act 1977	Conservation Area Reserves	Controlled Use Areas Occasional and irregular. Regular use may be considered on a site-by-site basis.
Parts of Aoraki/Mount Cook National Park	Tasman Valley, eastern side of Malte Brun Range, and Lower Murchison Valley (for heli-skiing only)	National Park	Frequent Use Area <i>Regular, irregular, occasional and as per Mount Cook National Park management plan (1989)</i>
Liebig, Ben Ōhau Ranges, other areas where heli-skiing is already established	This includes conservation areas on the Liebig Range, Ben Ōhau, and areas where heli-skiing exists on the Two Thumb, Arrowsmith and Mount Hutt Ranges	Conservation Area	Frequent Use Areas Regular, irregular, occasional

4. Impose concession conditions that include (but are not limited to):
 - protecting natural quiet, recreational and other values on or near landing sites
 - avoiding defined areas of natural quiet
 - prescribing, if necessary, the timing and frequency of landings on a daily and/or seasonal basis
 - prescribing the total number (quota) of permitted landings within defined areas
 - allowing the transferability of aircraft landing concessions, subject to defined performance standards
 - user-pays monitoring of the effects of aircraft access on visitors and other values that the land may contain
 - charging market rentals reflecting the market value of the use of each site, in accordance with the Conservation Act 1987.
5. Consider publicly offering concession opportunities in areas where the department considers a market exists.
6. Implement the aircraft policies of the Arthur's Pass National Park Management Plan (1995) and the Mount Cook National Park Management Plan (1989), consistent with the implementations above and below.
7. Ensure that all operators are authorised by the Department for concessions.
8. Liaise with other South Island Conservancies, in particular the West Coast, to ensure aircraft access is managed in a co-ordinated manner.
9. Liaise with Civil Aviation Authority, operators and territorial authorities on the use of airspace, landings, airports and the issue of concessions.
10. Undertake research and monitoring, in consultation with concessionaires, CAA and recreationists, to determine levels of aircraft activity and noise levels that will result in an improvement of the experience of visitors in Aoraki/Mount Cook National Park.
11. Advocate for and implement methods of aircraft activity and noise management to improve visitor experience.
12. Require joint use of landing sites and facilities by operators, subject to existing concessions. With the exception of Mount Cook airport, the use of airports/airstrips near land managed by the Department will be preferred over new facilities within areas managed by the Department.

Priorities

1. Considering and granting concession applications, and managing existing concessions for aircraft landings, as required under the Conservation Act 1987.
2. Where possible, monitor and/or require concessionaires to monitor the effects of their activities so that in the medium-to-long term, better information is obtained on the values of the areas and the effects of aircraft activities on these values.
3. Advocate and liaise with relevant authorities, interest groups and operators to minimise the effects of aircraft overflights.

Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include:

- comprehensive monitoring of all aircraft landing concessions on land managed by the Conservancy

See also: 5.3.2 Recreation Opportunities
 5.3.4 Visitor Impacts and Safety
 5.4.2 Concessions General

Table 38: Key Aircraft Access Priorities

Theme	Issue	Method	Result Sought	Place
Aircraft access	Widespread and uncontrolled aircraft access that leads to the degradation of the values that the land contains and the experience of other visitors	1. Consider and manage applications on an effects basis 2. Monitor effects 3. Advocate for control of aircraft overflights as required	Reasonable access permitted while avoiding, remedying or mitigating effects and protecting natural values and the experiences of visitors	All places
Aircraft landings	See also: Table 37	See also: Table 37	See also: Table 37	All places

5.4.2.10 Filming

- considering applications and managing concessions for commercial filming and photography on land managed by the Department

Current Situation

The Conservancy receives a number of applications each year for commercial filming. The Department's *Guidelines for managing commercial filming on conservation lands* (1997) establish a standard operating procedure for processing applications. Depending on the scale of the activity, commercial filming can cause varying effects.

Statutory Framework

Section 17Q of the Conservation Act, section 49(1) of the National Parks Act and section 59A of the Reserves Act allow the Department, under delegated authority from the Minister, to grant concessions for commercial filming, in accordance with Part IIIB of the Conservation Act.

Objective

- To consider applications for commercial filming and photography and to grant and manage concessions where reasonable and practical measures can be taken to avoid, remedy or mitigate any adverse effects.

Implementation

The Conservancy will:

1. Consider applications for commercial filming and photography and grant concessions on land managed by the Department, having regard to (but not limited to):
 - adverse effects on natural and historic resources
 - opportunities for others to appropriately use areas managed by the Conservancy
 - standards of visitor safety
 - methods of access (see 5.4.2.9 Aircraft)
 - any suggestion of product endorsement by the Department of Conservation, unless an agreement is made
 - the subject matter's consistency with conservation
2. Impose conditions as deemed appropriate. These may include (but not be limited to):
 - a staff member accompanying the concessionaire (to ensure that conditions are adhered to)
 - acknowledgement of the location
 - an appropriate market rental

Priorities

The Conservancy will consider applications for commercial filming and photography on land managed by the Department, and grant and manage concessions where the activity will not have significant adverse effects on natural and historic values and recreation opportunities.

Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include comprehensive monitoring of all filming and photography activities.

Key priority table not required.

5.4.2.11 Guiding

- Considering applications and granting and managing concessions for guiding on land managed by the Department

Current Situation

Guiding refers to activities on land managed by the Conservancy where a commercial return is sought in return for guiding visitors on recreational activities. This may include guided climbing, alpine instruction, kayaking, hunting, tramping, fishing, natural history tours, ski-touring, and 4-wheel-drive safaris.

There are more than fifty guided hunting, fishing, alpine climbing, ski-touring, tramping and walking operations in Canterbury. Most of the concessionaires are authorised to guide throughout most of the land managed by the Department.

Guiding offers experiences for people who are either unable or unwilling to participate independently. This type of service is also beneficial for the safety of some visitors. Good guiding practices can minimise the social, physical and ecological adverse effects of clients and at the same time advocate conservation. Guiding offers people a chance to experience and enjoy protected natural areas in a controlled and safe manner. In most Canterbury instances, these are small-scale, low-impact operations. The Department's *Visitor Strategy* (1996) recognises the potential for providing satisfying visitor experiences through concession operations.

Guides are in a good position to impart a sense of environmental responsibility to their clients and also ensure proper use of public facilities. In backcountry areas, guides and their clients are often indistinguishable from other visitors. Clients of commercial guides may be no different from people who have chosen to visit land managed by the Department without using such services.

Adverse effects arising from small-scale guiding activities tend to be social rather than environmental. However, to mitigate these effects, as well as those from large-scale operations, conditions are necessary. For instance, heli-skiing necessitates some restriction on the number of operators in a given area for noise pollution and visitor safety. The Department must adopt a managerial regime that protects natural and historic resources, provides for a safe and enjoyable visitor experience with respect to each area's values, and protects the experiences of other recreationists from significant adverse effects, and respects Māori tikanga.

It is a reasonable expectation of both the Department and clients that guiding concessionaires provide a safe and professional service. The UIAGM (Union Internationale des Associations des Guides de Montagne) Mountain and Ski Guiding qualification is recognised as a benchmark qualification for high-altitude guiding services in Aoraki/Mount Cook National Park and similar terrain elsewhere. Other areas, terrain, seasons, and/or activities allow for a more flexible approach. The Department is encouraging other national organisations to develop benchmark qualifications for all types of guiding.

Statutory Framework

Section 17Q of the Conservation Act, section 49(1) of the National Parks Act and section 59A of the Reserves Act allow the Department, under delegated authority from the Minister, to grant concessions in accordance with Part IIIB of the Conservation Act.

Objectives

- To consider applications and grant and manage concessions for guiding, having regard to reasonable and practicable measures to avoid, remedy and mitigate any adverse effects.
- To encourage guiding concessionaires to impart to their clients an awareness and understanding of the value and distinctiveness of Canterbury's natural, historic and recreational values.
- To authorise a range of commercial guiding opportunities so that visitors obtain quality experiences and the Department obtains appropriate rentals; consistent with conserving natural and historic resources, retaining free public access and minimising conflicts with other recreation users.
- To encourage guiding organisations and the guiding industry to maintain and enhance appropriate professional standards of environmental protection, safety and visitor enjoyment.
- To develop cost-recovery monitoring programmes for guiding concessionaires to enable the Conservancy to ascertain the adverse effects of guiding concessions.

Implementation

The Conservancy will:

1. Consider applications for guiding concessions, having regard to (but not limited to):
 - experience and qualifications of the guides
 - party size
 - duration and timing of visits
 - appropriateness of party size to the natural and historic values and recreation opportunities for which the land is managed
 - ability to manage risks, hazards and emergencies
 - tikanga Māori
 - appropriate rental
 - land status
 - relevant Acts, policies, strategies and plans
2. Impose conditions as deemed appropriate including (but not limited to):
 - limiting the location, frequency and size of parties
 - requiring guides to inform the Conservancy of the location, frequency and party size of the guided events
 - client compliance with the *New Zealand Environmental Care Code* (n.d.) and *New Zealand Water Care Code* (1995)
 - providing interpretation for clients on the natural and historic resources in use
 - monitoring adverse effects and providing feedback to the Department
3. Require applicants to submit an appropriate Environmental Impact Assessment (EIA) with the application and at the applicant's expense (see 5.4.2 Concessions General).
4. Liaise with the New Zealand Qualifications Authority, NZMGA guiding organisations, the Adventure Tourism Council and the New Zealand Mountain Safety Council to encourage the development of appropriate standards and qualifications for various types of guiding activities.
5. Establish liaison with guiding operators and industry groups to achieve high-quality management and operations to meet the needs of clients in a safe manner that minimises adverse effects on natural, historic and recreational values.
6. Establish and maintain a database of the numbers, distribution and timing of guiding concessions in the Conservancy.
7. Develop systems for effective cost-recovery monitoring of concession activities, including standards of service and impacts. Such systems would ensure future commercial guiding minimises adverse effects on natural, historic and recreational values while enhancing client safety, enjoyment and understanding.
8. Ensure that guiding operators are permitted the same means of access to backcountry areas as the general public. At the same time, the Conservancy must ensure vehicles and aircraft are not inappropriately used on land managed by the Department.

Priorities

Monitoring concessionaire activities and their effects is a priority for the Conservancy.

Industry training in environmental care and conservation interpretation are important directions in the future, providing the opportunity for the Conservancy and concessionaires to work together in providing quality services for commercially guided visitors.

The Department must ensure it obtains an appropriate rental from guiding activities.

Less Achievable Tasks

- Tasks the Conservancy may not be able to undertake or complete include monitoring of all guiding concessions.

See also:

5.4.2.9 Aircraft.

Key priority table not required.

5.4.2.12 Sporting and Other Events

- considering applications and granting and managing concessions for sporting and other events on land managed by the Department

Current Situation

There has been a trend in recent years to hold organised sporting or other events (on land managed by the Department) that involve competition, fees and sponsorship, and which attract media attention. Events such as this are recognised as a valid and appropriate recreation opportunity.

While they are of short duration, the concentrated effects of participants and supporters have the potential to adversely affect natural and historic resources, and to alter the recreational character of an area.

In Canterbury, current events include the mountain running section of the Coast-to-Coast multi-sport Event and the Avalanche Peak Challenge, both in Arthur's Pass National Park. A small number of one-off mountain-bike races have been permitted in other areas.

There are physical, ecological and social effects from sports and other events. Track and vegetation damage is low when confined to well-graded, existing track systems in dry conditions. The impacts on wildlife are presently unknown.

The Department's *Guidelines on concessions for special or sporting events in conservation areas, national parks and reserves* (1992), along with Part IIIB of the Conservation Act and provisions in the Aoraki/Mount Cook and Arthur's Pass national park management plans, provide the direction for managing such events.

Statutory Framework

Section 17Q of the Conservation Act, section 49(1) of the National Parks Act and section 59A of the Reserves Act allow the Department, under delegated authority from the Minister, to grant concessions in accordance with Part IIIB of the Conservation Act.

Organised but non-commercial events in a national park are subject to the relevant park by-laws.

Objective

- To consider applications for sporting and other events and to grant and manage concessions where the adverse effects on natural, historic and recreational values can be avoided, remedied or mitigated.

Implementation

The Conservancy will:

1. Consider applications for special and sporting event concessions having regard to (but not limited to):
 - adverse effects on or adjacent to the event's route, including track systems
 - the area and facilities to be used, and their ability to accommodate the activity
 - conditions to be imposed by the organisers
 - whether the event could occur outside land managed by the Department or on land of lower natural, historic or recreational value
 - adverse effects on other visitors, including other organised sporting and competitive events
 - recreation opportunities in Canterbury, the South Island and New Zealand
 - retaining the wilderness qualities of the Rangitata Unit (see 4.8.6 Upper Rangitata/Rakaia)
 - status of land
 - relevant Acts, policies, strategies and plans(See 5.4.2 Concessions General)
2. Impose conditions as deemed appropriate. These may include (but are not limited to):
 - protecting the natural and historic resources
 - procedures for cancelling or postponing the event
 - safety issues
 - control of numbers, either absolutely or in certain areas
 - restrictions or bans on practices
 - requirements for approval before any public advertising is permitted
 - advance promotion to be consistent with concession conditions
 - prior consultation with or supervision by Department staff
 - exemption by the Department from responsibility for insurance or safety of the participants
- confining the event to pre-agreed routes (generally these will be existing track systems, suitable riverbeds or other hardened areas)

- monitoring of social and environmental effects to be undertaken at the applicant's expense
- performance bonds
- reporting after the event on its success or failure, including numbers of participants, financial statements etc.
- appropriate rental and recovery of costs incurred by the Department in considering, permitting, and managing events, and the application of appropriate cost-recovery fees and concession rentals for all events.

3. Ensure appropriate user-pays monitoring of all sporting and special events is carried out.

Priority

A primary priority of the Department is to improve the quality and methodology involved in monitoring currently permitted sporting and other events on conservation lands.

Particular attention will be paid to existing events (such as the Coast-to-Coast) to establish standards for additional event approvals.

Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include comprehensive monitoring of all sporting and other events.

Table 39: Key Sporting and Other Events Priorities

Theme	Issues	Method	Results Sought	Place
Existing events	Coast-to-Coast (Arthur's Pass) 1. Impact on wildlife, sites, tracks, other users 2. Licensing, monitoring	1. Research on effects 2. Surveying and monitoring impacts 3. Concession conditions 4. Public consultation	Adverse effects on natural, recreational and historic resources prevented, mitigated or compensated	Waimakariri
New events	Growth of sporting events and their impacts	1. Consider site route/suitability 2. Evaluate impacts 3. Concession processing	Avoid, remedy or mitigate adverse effects on natural, recreational and historic resources	All places
Wilderness areas	Impact of sporting events in proposed Adams Wilderness Area	Restrict sporting events in proposed Adams Wilderness Area	No adverse impacts on wilderness values	Rangitata Waitaki
Planning for events	No provision in current Aoraki/Mount Cook Management Plan for sporting events	Review plan to set criteria for sporting events	Policies and conditions set in plan to allow sporting events	

5.4.3 Prospecting, Mining and Quarrying

- controlling and monitoring prospecting, mining and quarrying on land managed by the Department

Current Situation

There are no significant deposits of precious metals in Canterbury but there have been serious attempts in the past to find gold at the head of the Wilberforce River near Browning Pass/Noti Raureka, and McQueens Valley on Banks Peninsula. Parts of the coast such as 'Ninety Mile Beach' south of Te Waihora have occasionally been worked for beach gold with limited success.

Several non-metallic minerals are more commonly distributed. Lime has been quarried for many years, while low-grade brown coal was worked by numerous small mines, notably in the Malvern Hills, Broken River and Mount Somers. A variety of clay bentonite found near Hororata is in demand for drillers' mud.

The alluvial plains provide abundant gravel and sand for road-making and concrete, which are extracted from riverbeds and coastal beaches or excavated from pits.

The only mining activity on lands managed by the Department is a silica sand-mining operation at Mount Somers. This activity will shortly become the new landowner's responsibility due to a land exchange currently being finalised. A major sand-mining operation at Kaitorete Spit near Te Waihora recently ceased. Efforts are now concentrated on monitoring the restoration and revegetation of the site to ensure the dune system is stabilised.

Mining is considered inappropriate in areas of high public use and/or high scenic scientific, natural or cultural value, due to the potential effects of mining on these values. Effects created by prospecting and exploration and some mining may, however, be acceptable elsewhere, if impacts can be avoided or mitigated to within acceptable environmental levels.

Statutory Framework

Lands managed by the Department are open to application for petroleum and mineral prospecting, exploration and mining activities. Any permanent closure of these requires a joint recommendation of the Ministers of Conservation and Energy, under section 62 of the Crown Minerals Act 1991, or special legislation.

Where a company or an individual seeks an exploration or mining licence, it must apply for a land access arrangement from the appropriate landowner. In the case of land managed by the Department, this is the Minister of Conservation with delegations to the Department. The Department can either permit (with conditions) or deny access for mining activities on land held or managed under the Conservation Act, the National Parks Act, the Reserves Act or any other Act specified in the First Schedule to the Conservation Act.

In considering a request for access, the Department must consider:

- the objectives of the Act under which the land is administered
- the purpose for which the land is held
- any policy statement or management plan related to the land
- safeguards against any potential adverse effects of the work
- such other matters as the Minister considers relevant

Access arrangements can be sought at any time before or after an individual has obtained a mining permit. Advice on the adverse effects of a proposal on public use of the area may be sought. An associated Resource Management Act consent may be required to minimise the environmental effects of the proposal. Access arrangements can be approved subject to conditions, or declined outright.

The permitting of taking rock and soil samples for non-commercial research is addressed in 5.5.5 (Research).

Objectives

- To consider applications for access for prospecting, exploration or mining and to grant and manage approvals, having regard to whether their adverse effects can be avoided, remedied or mitigated.
- To ensure that any proposed mining activity is properly assessed to enable any potential adverse effects to be avoided, remedied or mitigated, and to ensure adequate compensation.

Implementation

The Conservancy will:

1. Require all mining applications to be accompanied by an environmental impact assessment (EIA) (see 5.5.6 Environmental Protection).
2. Assess prospecting and exploration proposals on their merits. New roads or tracks, and vehicle access off existing tracks will generally not be permitted.
3. Require applicants to show that the impacts of the mining and associated infrastructure will be minimal, and that the land and water habitat, natural, recreational and historic values of the area will not be compromised. (For example, underground mining or mining using hand-held non-motorised methods may be acceptable.) Gravel extraction from riverbeds and coastal areas should avoid, remedy or mitigate adverse effects on freshwater fisheries and wildlife habitats.
4. Assess applications with regard (but not limited) to:
 - clear map and text details on the proposed work programme outlining the extent of mining, duration of activity and remedial measures, as well as the natural and historic resources and recreational values affected
 - whether the adverse effects of the activity can be avoided, remedied or mitigated (if approved, appropriate conditions will be sought to achieve this)
 - whether the restoration proposed is adequate and can be achieved
 - whether there is adequate financial protection by way of an insurance or bond to ensure compliance with conditions and remedial action
 - the adequacy of compensation offered for access to the land for prospecting, exploration or mining
5. Recover all costs incurred by the Department in processing and monitoring applications.
6. Require applicants to supply details of areas to be worked, methods of working, water supply and disposal, spoil disposal areas, waste disposal, and details of supporting facilities.
7. Include conditions in any access arrangement that allow the Department to make submissions on any associated Resource Management Act applications, and to modify access arrangements as a result of Resource Management Act consents granted.
8. Seek necessary suitable conditions for resource consents to make sure any operations will avoid, remedy or mitigate adverse effects on the natural and historic values of the site or sites involved.
9. Promote performance standards for mining and quarrying in Resource Management Act policy statements and plans developed by local authorities, as they may affect land managed by the Department.
10. Monitor resource consent applications where significant effects on natural, historic or recreational values are caused by mining and quarrying.
11. Require monitoring at the applicant's expense of mining activities that are likely to impact on indigenous vegetation, wildlife, historic or recreational values.
12. Not permit clearance of indigenous vegetation unless compensation or restoration of indigenous vegetation is possible.
13. Impose conditions to prevent the introduction of weeds and pests.
14. Emphasise restoration methods, appropriate ground preparation and weed and pest control to accelerate natural succession rather than sowing or planting.
15. Continue restoration of the mined area on Kaitorete Spit (see 4.6.4 Kaitorete Spit).

Priorities

Primary

The Department will meet its requirements under the Crown Minerals Act 1991.

Priority Sites and Actions

Restoration of the Kaitorete Spit sand-mining site will continue. New applications will be assessed against the implementation criteria.

Less Achievable Tasks

There are few constraints on departmental management, given the very low level of mining activity in Canterbury.

Table 40: Key Prospecting, Mining and Quarrying Priorities

Theme	Issues	Method	Results Sought	Place
Sand mining in sand dunes	Mining impacts on historic and cultural sites, and on fauna and flora	1. Bond 2. Restoration	Native sand dune community enhanced	Plains (Kaitorete Spit)

5.4.4 Military Use

- Managing lands managed by the Conservancy used for defence purposes

Background

Current Situation

The size and remoteness of some lands managed by the Department makes them attractive for defence training. The Department receives a number of requests for the use of areas it administers. Large-scale military exercises have been carried out in Arthur's Pass National Park, Craigieburn, Mount Thomas and Mount Oxford Conservation Areas and Aoraki/Mount Cook National Park. These exercises have taken place for many years. Present military exercises continue to be centred near Lake Tekapo where the New Zealand Defence Force maintains and operates the Tekapo Military Training Area.

The relative seclusion and access to land managed by the Department makes Canterbury sites ideal for defence training. For example, a reserve at Oxford, known as Little Malaya, is used for jungle-warfare training.

Under the Military Manoeuvres Act 1915, the Governor-General may proclaim land (including lands administered by the Department) to be available for military manoeuvres. Any other intended defence activity, however, requires the approval of the Department.

Defence Training

The Department and the New Zealand Defence Force are parties to a *Defence Training Agreement* (1990), which provides for military training to be carried out on state areas as defined in the Forest and Rural Fires Act 1977, provided certain conditions are met. Departmental approval to carry out military exercises is issued subject to conditions to protect natural and historic resources, and ensure the safety of visitors.

In return, the New Zealand Defence Force may make available fire-fighting assistance to the Department. Further assistance for various projects, including track construction and maintenance and transportation of departmental personnel to remote areas managed by the Department, by road, air and sea, is also provided.

Military training within the Conservancy may also involve Royal New Zealand Airforce participating in low-level flying in airspace above the Conservancy. Low-level flying is undertaken in accordance with the Civil Aviation New Zealand aeronautical information publications that recognise notified wildlife sanctuaries and nature reserves. Consent must be obtained from the controlling authority if flying is proposed within restricted airspace.

Objective

- To allow military use of lands managed by the Department in accordance with the 1990 Defence Training Agreement.

Implementation

The Conservancy will:

1. Work co-operatively with the New Zealand Defence Force to manage the effects, if any, of military exercises.
2. Consider, on their merits, requests for military use of land managed by the Department in accordance with the criteria in the agreement.
3. Apply conditions, as appropriate, to reduce adverse effects on natural and historic resources and on visitors.
4. Liaise with the New Zealand Defence Headquarters to seek protection of natural and historic resources where land managed by the Department is subject to a proclamation under the Military Manoeuvres Act 1915.

Priorities

Meet the requirements of the 1990 Defence Training agreement.

Less Achievable Tasks

Given the nature and scale of military use, there are few constraints in the Conservancy.

Key priority table not required.

5.4.5 Traditional Māori Uses

- considering applications and approving and managing agreements for the non-commercial taking of protected animals and plants by Ngāi Tahu

Background

The natural resources of New Zealand, particularly indigenous plants and animals, have traditionally formed an important cultural and spiritual part of the Māori way of life. The Conservancy must consider all non-commercial requests for the traditional taking or use of protected animals and plants by Ngāi Tahu.

Since the arrival of humans some resources have been depleted; in some cases they have become extinct. To halt this decline in indigenous species, various pieces of legislation were established to help protect them.

Legislation providing for the protection of species and the day-to-day management of these species necessarily reflects the need to ensure New Zealand's natural resources are maintained for the benefit of all New Zealanders. This legislation in part recognises the significant spiritual and cultural role indigenous plants and animals have in the Māori way of life and the importance of maintaining traditional values. Many of the old ways are unable to be pursued in today's environment, especially where it might involve the use of threatened species. The use has to be balanced against the vulnerability of the species.

The New Zealand Conservation Authority developed a discussion paper on this issue which was the subject to wide public consultation. It was referred to the Minister of Conservation in June 1998 for his consideration.

The taking of abundant species for cultural purposes will be allowed where their use is sustainable and within the constraints of the law. As a matter of priority, it will be important for the Department to initiate research into the sustainable use of indigenous species.

Birds and Mammals

The Conservancy receives a number of applications for the traditional use of feathers of dead indigenous birds, whalebone and teeth held by the Department.

Each application is considered in consultation with the rūnanga in the area and is approved on the basis that it has rūnanga support and the end use of feathers, whalebone and teeth are for traditional purposes.

Due to the scarcity of many indigenous bird species today, the taking of threatened birds may compromise the long-term viability of these species.

Plants

There is a resurgence of interest in the use of indigenous plants and timber for cultural purposes and traditional medicines. Important plants for cultural use include pingao and harakeke. Tōtara is particularly sought after for carving.

A wide range of species is utilised for medicines, including kawakawa and harakeke.

The Conservancy is a stronghold for the much sought after pingao. The plant is now difficult to obtain in many districts, putting additional pressure on the resources in this Conservancy. A set of procedures on sustainable Māori cultural use of indigenous plants is being developed to guide the taking of indigenous plants on land managed by the Department.

Where possible, the Conservancy will assist Ngāi Tahu with the planting of culturally significant plants on private land to reduce the need for plants to be gathered from land managed by the Department. The Conservancy's nursery at Motukarara can assist rūnanga to propagate and cultivate plants.

Statutory Framework

Under the National Parks, Reserves, Conservation and Wildlife Act, species and natural resources are generally protected. However, specific provision exists to allow the taking of material for cultural use by Māori people under these Acts. For example, in the *General Policy for National Parks* (National Parks and Reserves Authority, 1983), policy 8.11 allows for the use of indigenous plants or animals by Māori people in specific circumstances.

The gathering of this material can be authorised under the following legislation:

Plants	- section 5(3) of the National Parks Act*
Plants	- section 30(2) of the Conservation Act
Flora and Fauna	- section 49 of the Reserves Act
Birds	- section 53(1) of the Wildlife Act
Marine Mammal Parts	- section 4(1) of the Marine Mammal Protection Act

(See 5.2.4 Freshwater Ecosystems, for fish management)

Objective

- To consider the non-commercial taking of natural materials for cultural purposes by Ngāi Tahu and grant approvals where species, populations and habitats are not adversely affected.

Implementation

The Conservancy will:

1. Consider, subject to conditions, the sustainable traditional use of plants, animals, and minerals from land managed by the Department, where:
 - the application is from Ngāi Tahu
 - the use is non-commercial
 - the use is sustainable
 - the use is for traditional cultural purposes
 - the use is permitted by statute and national policyRelevant criteria from 5.4.2 (Concessions General) apply
2. Liaise with Ngāi Tahu to:
 - identify and define what is traditional use of natural resources for traditional Māori purposes
 - define what are acceptable levels for the use of natural resources
 - establish criteria to define the traditional methods and set conditions to be met during gathering
 - give effect to Ngāi Tahu cultural use policy where legislation permits
 - co-operate in the setting-up of cultural material banks
 - establish protocols for the taking and use of materials made available from sources such as track clearance, maintenance and road realignment, etc.
 - develop and implement procedures for monitoring and controlling levels and methods of gathering that still preserve and protect the animal or plant species
 - keep records of applications for traditional taking
3. Develop, in consultation with Ngāi Tahu, protocols for the gathering, storage and distribution of:
 - plant materials
 - marine mammal parts (including whale bone)
 - minerals
 - birds (including feathers)
 - other Ngāi Tahu taonga as appropriate
4. Consult with Ngāi Tahu, conservation boards and other groups where significant conflict arises between proposed traditional taking and natural values.
5. Encourage and provide advice to Ngāi Tahu in the establishment of planting programmes, including marae-based nurseries, to provide plants for traditional purposes.
6. Promote research into the sustainable taking of indigenous plants and animals, in accordance with national policy and guidelines.

See also: 5.1.2 Treaty Partnership

Priorities

Primary

Develop guidelines in consultation with Ngāi Tahu for the gathering and distribution of feathers, plant materials and whalebone.

* Where provided for in the relevant management plans.

Less Achievable Tasks

Consideration of applications for protected animal species, in particular, will be circumscribed by current government policy.

Key priorities table not required.

5.5.2 Statutory Land Management

- statutory protection, exchange or disposal, closing, and classification or status change of land

Current Situation

Background

The Department maintains a land register that records each unit of land it manages. Basic information, such as the name of the area, its classification, area and legal description are recorded. A Geographic Information System (GIS) is used to store all data and to prepare maps of areas managed by the Department and of natural and historic resources. Information from this is summarised in the CMS Inventory (Volume 2), which records briefly the natural and historic resources present, recreational facilities and uses of each area. Volume 2, Schedule 2 gives the priorities for the management of 230 main land units.

The areas managed by the Conservancy include approximately 1360 parcels of land allocated to the Department since 1987. Of these areas, 409 are under 1 hectare and 388 are between 1 hectare and 5 hectares. Most land managed by the Department is in national parks and conservation areas along the main divide of the Southern Alps.

The Department maintains an oversight under the Reserves Act of some 2460 parcels of reserve managed by 10 local authorities. The majority of reserves are recreation reserves. Some in urban areas and on the coast attract high levels of public use.

The variety of available land classifications allows areas to be managed to protect natural, historic and recreational resources. The various Acts and categories provide a range of management directions and restrictions on the activities that can take place. Some of the existing classifications and legal status of areas in the Conservancy do not reflect their values or public use. However, changes and review of the status of areas can be a lengthy and complex process the outcome of which generally is not significant for day-to-day management. The Department will undertake reclassification exercises only where the natural and historic benefits of reclassification outweigh the disadvantages.

Disposal and Transfer

The Department wishes to rationalise its landholdings to reduce its management of areas of low natural, historic and recreational resource value. However, the Department will only pursue the sale or transfer of land if there is a net benefit to conservation from the disposal, or an exchange of land with greater natural and historic resources is possible. Sections 16 and 26 of the Conservation Act apply, and for Reserves, the classification must be resolved under section 15 of the Reserves Act. Proceeds from reserves are used on a national basis for the acquisition, management or protection of reserves.

The Department's approach is that land of predominantly local interest may be best managed by local government or communities, and land of national or regional natural or historic interest by the Department.

Ngāi Tahu Claims

The Waitangi Tribunal has investigated Ngāi Tahu grievances under the Treaty of Waitangi and the Crown has entered into a settlement with Ngāi Tahu to resolve the grievances (Deed of Settlement 1997 and Ngāi Tahu Claims Settlement Act 1998). The Conservancy is required to implement Government directions from this Act.

If a particular area is declared surplus for disposal by the Department, a right of first refusal must be offered to Te Rūnanga o Ngāi Tahu.

Reserves

The majority of reserves administered by local authorities under the Reserves Act 1977 are recreation reserves. The Department processes many applications, as required under the Reserves Act, for these reserves, e.g. leases to sports clubs. To reduce administrative workloads, the Department encourages local authorities to prepare management plans for their reserves and to accept the vesting of reserves of local importance.

Where reserves have significant natural and historic resources, the Department will work with local authorities to establish appropriate management direction. As a last resort, with the consent of the local authority or if there is a breach of trust of the vesting, the Minister has the power under the Reserves Act 1977 to revoke the vesting of a reserve derived from the Crown. The Minister has similar powers to change administering bodies of reserves vested in the Crown.

Acquisition

The Conservancy in the last few years has acquired high-priority areas through the Forest Heritage Fund and the Land Acquisition Fund. Large areas of land in the high country have also been added through pastoral lease surrender. The tenure review process for pastoral leases and other lands (see 5.2.3 Land Ecosystems) is expected to increase the extent of land managed by the Department.

Statutory Framework

The Conservation Act 1987, Wildlife Act 1953, National Parks Act 1980 and Reserves Act 1977 provide the Department with the ability to acquire, exchange and dispose of land and to classify areas it manages in accordance with the classes of protected land established in the Acts. The purpose of protected area classifications is to ensure the control, management and appropriate levels of development and preservation for areas.

Under the Reserves Act, the Department oversees the management of reserves administered by and vested in other organisations, and has an approval role for some management plans and activities on reserves for which a management plan does not exist.

Objectives

- To implement the Crown's settlement with Ngāi Tahu.
- To systematically locate, describe, and upgrade the natural, historic and recreational values, administrative details and management issues of all land managed by the Department (as partially completed in Volume 2, Schedule 2).
- To manage land for the purposes outlined in the legislation under which it is held.
- To prioritise statutory management work to maximise gains in the protection of a broad range of Canterbury's indigenous biodiversity.
- To seek to rationalise the amount of land managed by the Department by realising net gains to natural, historic and recreational value in the sale or exchange of land.
- To acquire land of high natural, historic and recreational value for management by the Department.
- To seek status or classification changes that are appropriate to the natural, historic and recreational values of land managed by the Department where resources permit.
- To reduce the Department's administrative involvement in reserves managed by local authorities under the Reserves Act 1977.
- To vest reserves in local authorities where the purposes, values and uses of the reserve are of local importance.
- To rationalise administrative units and land status for groupings of land managed by the Department.
- To investigate the increased protection of land managed by the Department in the Ōhau-Ahuriri and upper Rangitata-Rakaia catchments, Two Thumb Range, Waimakariri-Ashley foothills, and the Hawkdun-Ōteake areas.

Implementation

The Conservancy will:

1. Maintain a computer register of all areas managed by the Department that contains the following:
 - administrative details
 - ecosystem or special information
 - historic or cultural information
 - recreation facilities
 - concession information
 - landscape information
 - management threats, issues and priorities
2. Seek to upgrade the land inventory at five-year intervals so that all areas managed by the Conservancy are included, and periodically updated.
3. Manage land, as appropriate, according to the purposes outlined in the Wildlife Act 1953, Reserves Act 1977, Conservation Act 1987 or the National Parks Act 1980.
4. Manage land according to the relevant policy, CMS, CMPs, functional strategies, by-laws and regulations. See also 6.1 (Plans and Functional Strategies) and 6.2 (CMS Implementation).
5. To manage significant areas of land according to priorities outlined in Volume 2, Schedule 2. These priorities will be revised as knowledge of the land units improves.

6. When assessing whether areas managed by the Conservancy or local authorities should be transferred, or disposed of, take into account the following:
 - the natural and historic resources and recreational opportunities of the area that should be protected (scientific, cultural, mahinga kai, historic features, landscape or recreational opportunities)
 - whether the area enhances the conservation or recreation values of any adjacent land managed by the Department or adjacent water body and public access to it
 - whether the area could be managed to maintain and enhance its natural and historic resources or recreational use by other organisations or individuals subject to a covenant
 - whether the area could be exchanged for another with significant natural and historic resources or high recreational use
 - public submissions received on the public notification to dispose of land
 - the views of the Historic Places Trust when any archaeological site or historic site is being considered
 - ecosystem and historic places priority criteria in 5.2.3 (Land Ecosystems, Implementation 3) and 5.2.7 (Historic Resources, Implementation 3).
7. Arrange the disposal of surplus areas in accordance with relevant government instructions relating to disposal of surplus lands of the Crown, including a right of first refusal to Te Rūnanga o Ngāi Tahu.
8. Acquire areas of land to be managed by the Department where the land has some or all of the following:
 - a high degree of indigenous biodiversity
 - rare or threatened indigenous flora and fauna
 - high historical, recreational or cultural value
 - high landscape or scenic value

This applies where areas meet the requirements of section 4 of the National Parks Act, section 3 of the Reserves Act and sections 18–25 of the Conservation Act.
9. Exchange land where there are net conservation benefits from such an exchange.
10. Participate in land tenure review negotiations and implement the outcomes of agreements.
11. Negotiate protection agreements over private land (see also 5.2.3 Land Ecosystems).
12. Liaise with local authorities to outline their obligations and responsibilities under the Reserves Act 1977, and in particular:
 - assist with policy and management advice where reserves have significant natural and historic resources
 - advise on the obligations of local authorities to prepare management plans, make submissions on plans and, where required, have them approved by the Department
 - encourage the vesting of reserves of local importance
 - encourage the production of reserve management plans that cover all reserves in the region or district
 - encourage the preparation of regional or district-wide reserves registers and strategies by sharing Department of Conservation and district council information
 - *encourage the practice of comprehensive regional or district-wide reserve reclassification to establish where possible the primary aim of reserve management, rather than individual ad hoc reclassification*
 - advise on good practices and applications under the Reserves Act generally
 - implement cost recovery for all Reserves Act 1977 approvals
13. Review classification or status of land managed by the Department when:
 - information on the land demonstrates that a change of protected status would be of conservation benefit
 - the unit or part of a unit has lost the values for which it was originally held, and restoration or enhancement is not practicable and changed status would better reflect this situation
 - access or activities need to be restricted to protect natural and historic resources
 - the views of affected parties and/or the public have been considered
 - the advice of the relevant Conservation Board has been considered for significant areas
14. Investigate, seek submissions under section 18 of the Conservation Act and, if supported, gazette conservation parks for the integrated management of conservation units in the Ōhau–Ahuriri and upper Rangitata–Rakaia catchments, Two Thumb Range, Torlesse Range, Waimakariri–Ashley foothills and Hawkdun–Ōteake areas.
15. Consider national park or conservation park status and additions to the parks for other units of land.
16. Review the protection status of major land units following the tenure review implementation process.
17. Gazette and review wilderness areas. See 4.8.6 (Rangitata) for the proposed Adams Wilderness Area and 5.3.2 (Recreation Opportunities) for wilderness areas generally.

18. Close areas, in whole or in part, in terms of the criteria set out in section 13 of the Conservation Act 1987, for example:
- in case of public safety
 - in case of emergency
 - in case of defence exercise
 - (in exceptional cases) for approved scientific research
19. Vest, reclassify and otherwise implement statutory management methods to action the Ngāi Tahu Claims Settlement Act 1998.

Priorities

Primary

The primary CMS priorities for statutory land management will be fivefold:

- increase the protection of indigenous ecosystems, species and landscapes not well represented in Canterbury's protected area network
- maintain and upgrade information on the values of and threats to land managed by the Conservancy.
- dispose of areas of low natural, historic or recreational value
- implement tenure review
- Ngāi Tahu Claims Settlement Act implementation.

Secondary

The CMS priority that is secondary, but will require the higher level of resources, is to meet statutory requirements to service local authorities and give consents under the Reserves, Conservation and National Parks Acts.

Tertiary

The tertiary priorities for statutory land management are twofold:

- change the status or classification of lands managed by the Department
- liaise with local authorities over Reserves Act management generally

Priority Sites

Sites on which important statutory land management initiatives have begun, and which will continue to require a significant portion of available resources in the immediate future, are set out in Table 41. This list will form an interim basis for direction of statutory management effort on land managed by the Department in Canterbury.

Less Achievable Tasks

Tasks that may not be undertaken or completed include the following:

- the establishment of a protected area system that fully represents Canterbury's indigenous diversity
- disposal of all areas of low natural, historic and recreational value
- reclassification of all land managed by the Department

Table 41: Key Statutory Land Management Priorities

Theme	Issue	Method	Result Sought	Place
Ngāi Tahu Claims Settlement	Implementation of Ngāi Tahu Claims Settlement Act 1998	1. Vesting 2. Reclassification 3. Freeholding 4. Other statutory management methods	Settlement implemented	All places
Protection of wetlands, tussock grasslands, scrublands and threatened species habitat	Threat of drainage, burning, pastoral development, and animal and plant pests through lack of legal protection	1. Reservation 2. Covenant 3. Management agreements 4. Landholder liaison	A broader range of ecosystems protected to more adequately protect a range of Canterbury's indigenous biodiversity	All places
Conservation parks	Lack of identity of DOC-managed land units	Investigate conservation parks: • Waimakariri/Ashley foothills • Torlesse • Upper Rangitata/Rakaia • Ōhau/Ahuriri Catchment • Hawkdun/Ōteake	Increased public awareness and legal protection	Puketeraki Rangitata Waitaki
Banks Peninsula reserves management	Management duplication	1. Vesting 2. Appointing to control and manage 3. DOC management 4. Community involvement	Management of reserves rationalised for public good	Banks Peninsula
Disposal of surplus land administered by the Department	Inappropriate use of limited departmental resources, e.g. weed control	1. Dispose of all surplus land managed by the Department 2. Identify all other surplus areas and schedule for disposal 3. Recover costs where possible	Disposal of all land of low natural, historic or recreational value	All places
Tenure review implementation	Acquisition of large areas of land from the review of pastoral leases under the Land Act	1. Implement results of tenure review agreements 2. Rationalise subsequent land status through conservation park/reserve/national park additions	1. Natural, landscape, historic and recreational values protected 2. Coherent and publicly recognisable units of protected land 3. Improved public access	Hurunui, Puketeraki Waimakariri Rangitata Pareora Waitaki

5.5.3 Compliance and Law Enforcement

- compliance with statutes administered by the Department

Current Situation

Voluntary Compliance

The first basic principle of compliance and law enforcement is to ensure that the public are aware of all the relevant laws relating to conservation management and that the laws are complied with voluntarily.

Where members of the public commit offences, the Department's job is firstly to maintain an intelligence network to locate suspects, and then evaluate the situation and consider if prosecutions should be sought.

Current Management

This Conservancy is one of the largest in New Zealand. There are three main areas of Compliance and Law Enforcement (CLE) activity identified within its boundaries:

- Offences relating to the Wild Animal Control Act.
- Marine mammal sanctuary (Banks Peninsula). Offences relating to this area include the netting of Hector's dolphin within the sanctuary.
- Whitebait Fishing Regulations. Canterbury contains a number of major rivers and streams where whitebait spawn and additional staff (honorary rangers) are recruited to help enforce the regulations.

Other CLE activities relate to the two national parks in the Conservancy, together with forest parks and reserves. The terrain of the Conservancy with its rugged coastline and mountainous areas provides a difficult situation for the detection of offences. A CLE co-ordinator, based in the Conservancy office, implements policy prepared by the national co-ordinator and ensures relevant staff receive training. Each area office in the Conservancy has a CLE co-ordinator.

Statutory Framework

The Conservancy has a duty to inform the public of all relevant statutes administered by the Department and to enforce them when necessary. Relevant acts are the:

- Conservation Act 1987 (includes the Freshwater Fisheries Regulations 1983)
- Marine Mammals Protection Act 1978
- Marine Reserves Act 1971
- National Parks Act 1980
- Native Plants Protection Act 1934
- New Zealand Walkways Act 1990
- Reserves Act 1977
- Trade in Endangered Species Act 1989
- Wild Animal Control Act 1977
- Wildlife Act 1953
- Forest and Rural Fires Act 1977

Recent provisions for dog control come under the Conservation Act (see 5.3.4 Visitor Impacts and Safety) and expand compliance and law-enforcement powers.

Objectives

- To encourage voluntary public compliance with statutes administered by the Department.
- To systematically gather intelligence, detect offences and initiate prosecution of offences under legislation administered by the Department.

Implementation

The Conservancy will:

1. Develop compliance programmes to reduce offences and increase public awareness of the responsibility for compliance with legislation administered by the Department.
2. Prioritise law enforcement operations to ensure most effective conservation results.
3. Provide adequate training to staff and honorary rangers, to ensure effective administration and maximise operational capability.

4. Initiate prosecution of offences based on offence repetition, offence severity, and the effects on natural, historic and recreational values, and public complaints.
5. Develop an intelligence system which provides the Conservancy and other law-enforcement agencies with knowledge of suspected illegal activities.
6. Liaise with other agencies responsible for law enforcement and regulatory procedures, such as New Zealand Police, New Zealand Customs Service, Fish and Game Councils, Ministry of Fisheries, and the Ministry of Agriculture.

Priorities

Primary

The primary Compliance and Law Enforcement priority is to seek the voluntary compliance of the public with the statutes the Department administers. This includes the maintenance of an intelligence system that provides knowledge of suspected illegal behaviour.

Secondary

The secondary Compliance and Law Enforcement priority is to detect and undertake prosecutions of offences relating to legislation the Department administers.

Key Priority Areas and Activities

The short- and medium-term key priorities for Compliance and Law Enforcement are outlined in Table 42.

Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include:

- extensive training of honorary rangers
- limited enforcement activity outside normal working hours

Table 42: Key Compliance and Law Enforcement Priorities

Activity	Issue	Method	Result Sought	Place
Marine mammal sanctuary	Illegal netting of dolphin	1. Surveillance 2. Public awareness, community and media liaison	Voluntary compliance or prosecution if necessary	Banks Peninsula
Wild animal control in recreational hunting areas and private land	Illegal hunting	1. Surveillance by trained staff and honorary rangers 2. Public awareness and public information 3. Supporting land-holders	Voluntary compliance or prosecution if necessary	All places
Whitebait fishing regulations	Non-compliance with regulations	1. Trained staff and voluntary rangers 2. Public awareness	Voluntary compliance or prosecution if necessary	Banks Peninsula Pareora Plains Lowry

5.5.4 Survey and Monitoring

- undertaking, supporting, or allowing survey and monitoring activities carried out to meet the Department's management and advocacy requirements

Current Situation

Background

Prior to the establishment of the Department, many survey and monitoring programmes were undertaken by the New Zealand Forest Service (forest and grassland surveys), the New Zealand Wildlife Service (SSWI, Lake Ellesmere/Te Waibora and braided river bird counts, forest wildlife surveys) and the Department of Lands and Survey (Scenic Reserves of Canterbury, Kelly, 1972). These programmes sought base data on ecosystems and species and monitored change resulting from threats such as from deer impacts, irrigation and hydro-electric development and productive forestry expansion. While the base data is retained by the Department, most of these previously ongoing survey and monitoring programmes have ceased.

Other organisations and individuals also had, and continue, ongoing survey programmes such as the Ornithological Society of New Zealand (braided river bird counts), the Royal Forest and Bird Protection Society (Peel Forest Park monitoring), and botanist Hugh Wilson (Mount Cook National Park botanical survey).

The Conservancy now has a range of general and specific survey programmes, for example:

- the protected natural areas (PNA) survey programme
- marine survey programme
- kiwi surveys
- tenure review surveys

The Conservancy also undertakes a number of monitoring programmes:

- long term aerial monitoring programme of Hector's dolphin population trends around Banks Peninsula
- shag monitoring in a variety of locations such as Scarborough Heads
- recreational use of important tracks and walkways in Canterbury
- monitoring of thar populations and vegetation communities within the thar range
- monitoring of wildlife populations on braided rivers in the Mackenzie Basin
- vegetation and fauna changes in Tekapo Scientific Reserve
- Canterbury mudfish/kōwaro surveys
- vegetation and reserve condition in relation to possum density

The current survey and monitoring programmes reflect past management actions and policy decisions. For instance, the marine mammal sanctuary monitoring programme is driven by the need to determine trends in dolphin abundance as a signal of management requirements and progress. On the other hand, the protected natural area (PNA) programme has a long history of policy support for complete ecological survey coverage of New Zealand. Unfortunately, the PNA programme has suffered through lack of consistent funding. Progress with ecological surveys in Canterbury is shown on Map 21. Other survey work, such as the kiwi surveys, has been driven by management requirements and the availability of sponsorship funding.

Monitoring has not been comprehensive, integrated or focused on natural, historic or recreational management. Large gaps in areas of information exist. Monitoring needs to be improved in two ways.

First, operational monitoring to assess the effectiveness of a range of management actions on land or species managed by the Department. Second, performance monitoring to assess how well management is meeting long-term objectives across the whole Conservancy.

Map 21 Ecological Survey



- Completed
- Underway
- Rapid inventory survey
- Ecological boundaries

Important areas in which there is currently little survey or monitoring, or where related problems exist include:

- comprehensive pest and wild animal distribution and impacts information
- comprehensive historic places information
- comprehensive recreational (motivation, satisfaction and impact) information.
- the lack of a departmental integrated GIS database

Statutory Framework

The Department is enabled to undertake survey and monitoring programmes by its functions under section 6(a) of the Conservation Act and from management requirements under the Reserves, National Parks, Wild Animal Control, Marine Mammals Protection, and Marine Reserves Acts. To manage natural and historic resources effectively, knowledge is required. Survey and monitoring provide the base information for rational management decisions.

Objectives

- To complete ecological surveys for all of Canterbury.
- To systematically identify values, threats and potential management actions on all land managed by the Department.
- To ensure that natural, historic and recreational information is collected, updated, stored and utilised to best enable the prioritisation of management and advocacy decisions.

Implementation

The Conservancy will:

1. Set priorities for surveys using criteria that reflect conservation management needs, such as:
 - vulnerability (e.g. category A and B species)
 - degree of threat (e.g. from major development proposal)
 - knowledge of species or area; need for baseline data (e.g. for tenure review)
 - importance of area/community (e.g. representativeness, high diversity)
 2. Set priorities for monitoring using criteria that reflect conservation management needs, such as:
 - effectiveness of management programmes at meeting management objectives
 - understanding short- and long-term effects, trends and causes
 - vulnerability
 - degree of threat
 - knowledge of species or area
 - importance of area/community
- For 1 and 2 see also the sub-sections of 5.2 (Heritage Conservation), 5.3 (Visitor Services) and 5.4 (Concessions and Other Uses).
3. Undertake survey and monitoring programmes that meet the priority criteria in 1 and 2 above.
 4. Support and encourage survey and monitoring programmes undertaken by other organisations or persons where such programmes meet Department criteria.
 5. Maintain all survey and monitoring databases with a GIS capability.
 6. Develop arrangements with other agencies (such as Fish and Game Councils) for sharing, storage and use of survey and monitoring information.
 7. Make information available to local government and other organisations involved in the management of those resources, in a readily understandable form.
 8. Ensure Department of Conservation information is available at Conservancy and Area office levels for ongoing management and advocacy purposes.
- See also 5.5.6 (Environmental Protection).

Priorities

Primary

1. The Conservancy will undertake ecological surveys in priority ecological districts in Canterbury. Criteria to determine district priorities are set out in 5.2.3 (Land Ecosystems, Implementation 5) and in national criteria currently being developed. Specific surveys will be undertaken where those surveys most contribute to the identification of natural values and threats or where they most contribute to other management requirements, e.g. tenure review in the high country. In the interim, particular efforts will be put into endangered plant and other species surveys, especially little-known or endangered invertebrates.
2. The Conservancy will establish monitoring systems for the assessment of impacts from visitor activities such as tramping, camping, aircraft use, mountain-biking and special sporting events. This monitoring needs to assess broad effects as well as site-specific impacts.

Secondary

The integration of the Department's natural, historic and recreational information into a GIS system.

Priority Sites and Actions

Priority survey sites (in the interim) will involve ecological districts in North Canterbury and South Canterbury foothill areas because there is little comprehensive ecological information in these areas and considerable land development is occurring. Specific invertebrate survey work will occur in the Mount Somers, Mackenzie Basin, and Banks Peninsula areas where several rare and endangered species are found.

Special monitoring programmes will continue for Hector's dolphin/upokohue around Banks Peninsula, for the southern crested grebe/kāmana, various endangered plant species, and in the Tekapo Scientific Reserve. Monitoring of the Coast-to-Coast and Avalanche Peak sporting events will continue.

Less Achievable Tasks

Tasks the Conservancy may not be able to undertake or complete include:

- completing a comprehensive ecological survey programme
- monitoring programmes, particularly for the impacts of various threats, including:
 - deer, chamois, and hare impact monitoring in grasslands and forest
 - weed impacts on braided river and mountain land communities
 - comprehensive recreational user and motivation studies on key priority sites
- long-term monitoring of representative ecosystems in Canterbury to determine trends in natural values. This will occur only if resources allow, although it is important to meet biodiversity goals.

Table 43: Key Survey and Monitoring Priorities

Theme	Issue	Method	Result Sought	Place
Braided riverbed wildlife communities	Unique habitat type containing threatened and endangered species at risk from habitat loss and predation	Trend counts	Population and habitat trends determined. Adverse trends may trigger management intervention	Waitaki (Ahuriri, lower Ohau, Tasman and Tekapo riverbeds)
Hector's dolphin/upokohue	Threatened species at risk from by-catch in set nets	Aerial monitoring to determine population trend	Population trends known and related to management action	Banks Peninsula
Wetland bird life	High level of diversity subject to change resulting from a variety of threats	5-yearly bird census	Trends in wildlife abundance known	Plains (Te Waihora)
Great-spotted kiwi and other forest birds	Predation by stoats and other animals	Periodic, but regular, trend monitoring	Trends in abundance, leading, where necessary, to management intervention	Waimakariri (Arthur's Pass) Hurunui (South Branch Hurunui River)
Category A and B plant and animal species	Wide range of threats including habitat loss and predation or browsing	Periodic, but regular trend monitoring	Trends in abundance leading, where necessary, to management intervention	All places

5.5.5 Research

- undertaking, supporting or allowing research that either benefits or does not have significant adverse effects on the management of natural, historic or recreational values.

Current Situation

Background

Canterbury is a major centre of research activity, including research focused on many activities related to functions of the Department. Examples of this conservation-related research include:

- water quality and quantity requirements in braided rivers and lakes, such as Te Waihora/Lake Ellesmere
- studies of recreational use, enjoyment and impacts
- endangered plants and animals
- long-term ecological research of environmental trends at places like Craigieburn Conservation Park
- grazing and restoration trials in tussock grasslands of the Mackenzie Basin
- predator and prey relationships and the control of mustelids and other animals
- invertebrate monitoring
- pest and weed control
- Hector's dolphin/upokohue ecology
- impacts on total visitor numbers on social experience and conservation values
- impacts of visitor facilities and services (for example, aircraft)
- the status of orange-fronted parakeet/kākariki-whereo.

Much of this research is funded by FORST, universities and government departments. Nevertheless, the Department, in Canterbury and nationally, supports much research based in Canterbury. Notable work undertaken in Canterbury but funded nationally includes:

- thar and chamois competitive relationships
- habitat and species relationships on braided river environments in the Mackenzie Basin
- grazing trials in the Mackenzie Basin
- research into the Hector's dolphin population around Banks Peninsula
- grassland Fire Weather Index for the National Rural Fire Authority

Canterbury Conservancy is directly involved in other research projects, either through staff time input, or through funding:

- kea and sheep interactions
- Hector's dolphin population ecology
- research into the habitat needs of the robust grasshopper
- Ahuriri River environmental responses to herbicide application

Important subjects in which there is currently little research but where it would be valuable include:

- economics of ecosystem protection and weed and pest control
- marine habitats and species interactions
- research into the effects of floodgates on native fisheries
- water flow level requirements for the protection of indigenous species and sports fish
- orange-fronted parakeet population status
- habitat requirements and management of threatened plant and animal species (see Appendix 2)
- effect of land management activities on water bodies
- successional development in tussock grasslands and biodiversity implications
- effects of pastoral development on kettlehole ponds
- microclimatic effects of adjacent forestry on indigenous communities
- effects of willow removal from high country lakes on southern crested grebe and bird populations generally
- social and site impacts of increased visitor numbers
- understanding the needs of visitors
- archaeological and historic site investigations and restoration planning

Statutory Framework

The Conservation, Reserves, National Parks, Wildlife, Marine Reserves and Marine Mammals Acts variously enable the taking, removal, killing or damaging of plants, animals and other natural resources. Any research that requires any of these actions must be authorised under the appropriate act.

Any sampling or collecting as part of a trade, business or occupation requires a concession under Part IIIB of the Conservation Act, or an authorisation under the appropriate legislation, depending on the status of the land.

Bioprospecting (assaying for biologically active compounds) has implications for Government policy on access to indigenous genetic resources. The indigenous fauna and flora claim to the Waitangi Tribunal (Wai 262) (1996) has been lodged over this matter. This involves issues associated with Māori interests and intellectual property rights. Until Government policy is clarified, the Department will generally not allow bioprospecting, commercial use, registration of intellectual property rights or transfer of material to third parties.

Objectives

- To undertake research and to consider applications for research on land or species managed by the Department where adverse effects can be avoided, mitigated or remedied.
- To provide support to researchers where the research is of benefit to major management and advocacy priorities.
- To develop contractual arrangements with researchers where the research, either in whole or in part, is commercially oriented.
- To provide research priorities to universities and other institutions.
- To implement research findings that benefit management.

Implementation

The Conservancy will:

1. Consider applications for research permits with respect to the following information:

- description of the activity
- location of the activity
- status of the land involved
- effects of proposal
- proposed measures to avoid, remedy or mitigate adverse effects
- duration of activity and reasons for duration
- applicant's ability to carry out the proposed activity
- the specimens and numbers required
- the effects of the activity on indigenous species and ecosystems and their populations
- Ngāi Tahu perspectives
- ethical and best practice protocols
- the necessity for the application

(5.5.6 Environmental Protection applies)

The Conservancy is unlikely to grant applications for bioprospecting that could be developed for commercial purposes until Government policy is clarified.

2. Impose conditions on successful applications that include (but are not limited to):

- the activity
- the name and address of the authorised person/organisation
- restoration of the site
- conditions to protect species or ecosystems and their populations
- detailed requirements for plant and animal handling
- areas authorised to collect
- excluded areas
- maximum sample sizes
- permitted species
- excluded species
- any reasonable and practicable measures to avoid, remedy or mitigate adverse effects
- any relevant national policy

- restrictions on the commercial use, registration of intellectual property rights and their transfer to third parties
 - method of collection
 - sharing resultant information
3. Base priorities for research on factors such as the following:
 - proposed management actions to alleviate threats to, or develop opportunities for, natural or other values that are severely constrained by the lack of research information
 - research information is urgently required for management
 - there is little or no knowledge about the matter of interest
 - there is strategic value to management from the research proceeding
 - any relevant national criteria
 4. Provide and upgrade a list of priority research projects and departmental contacts to universities throughout New Zealand.
 5. Consider financial, logistical and other support where research proposals meet the following:
 - national research agenda priorities
 - the research is of management priority for Canterbury Conservancy
 - the research provides excellent value for money
 6. Provide access to huts, tracks and other logistical requirements where the research is of benefit to the management of natural, historic or recreational values.
 7. Formally contract out research where financial support is provided with conditions similar to those in Implementation 5 above.
 8. Require intending researchers to contact the Conservator at least one month in advance (except under exceptional circumstances) to allow proposals to be checked before they start to ensure that they can be safely undertaken, will not be detrimental, will not interfere with existing programmes or public enjoyment, and are scientifically sound. (Researchers have the same rights of free entry and access to land managed by the Department as does the public.)
 9. Recognise Craigieburn Conservation Park as a focal point for research into alpine and subalpine environments.

Priorities

Primary

It is important to direct research to those areas we know about or which face threats to their viability. The conservancy will therefore provide the most support for research that addresses these concerns. For the foreseeable future, the main focus will be on threatened species management, ecological processes relating to threatened ecosystems and restoration, and avoiding and mitigating the impacts of recreation tourism.

Secondary

The Department will support, where possible, applications for financial support that best meet the management priorities of the Department.

Priority Sites

Priority sites, at least in the short term, will focus on endangered species such as Hector's dolphin/upokohue around Banks Peninsula, the threatened species and ecosystems of the Mackenzie and Waimakariri Basins, and the effects of aircraft noise on visitor enjoyment at Aoraki/Mount Cook.

Less Achievable Tasks

While the Conservancy will meet the procedural requirements listed within the above implementations, the extent to which it undertakes research or can support other research will be determined by business plan funding.

Table 44: Key Research Priorities

Theme	Issue	Method	Result Sought	Place
Braided riverbed communities and habitat management	Unique habitat type containing threatened and endangered species at risk from habitat loss and predation	1. Habitat manipulation experiments 2. Predator control research 3. Observation of bird behaviour	Best methods to restore riverbeds and other habitats determined and cost-effective techniques developed	Waitaki – Ahuriri, lower Ohau, Tasman and Tekapo riverbeds
Fescue tussock grassland	Large scale degradation; rabbits; and local community interest – lack of knowledge about trends and restoration opportunities	1. Permanent plot monitoring 2. Revegetation trials	Trend in grassland condition determined and cost-effective restoration techniques developed	Waitaki – Tekapo Scientific Reserve
Alpine grass and shrublands	Grazing by Himalayan thar, chamois, hares, possum and sheep	Enclosure and permanent plot monitoring to determine various levels of species impacts	Relationship between various herbivores and vegetation condition determined and management efforts directed by trends in overall herbivore impact	Waitaki, Rangitata
Hector's dolphin/upokohue	Threatened species at risk from by-catch in set nets; uncertainty about population size, seasonal and diurnal movements, and population structure; ability to develop techniques that will assist dolphins to avoid set nets.	1. New population census 2. Ongoing support for movements research 3. Support for studies into methods of better managing set net and dolphin interaction	Outcomes assist management of Hector's dolphin	Banks Peninsula
Category A and B plant, bat, fish and invertebrate species	1. Wide range of threats including habitat loss and predation for browsing 2. Orange-fronted parakeet hybridising	Appropriate research directed to best aiding the protection of species and their habitats	Research outcomes are management related	1. All places 2. Hurunui
Aircraft noise	Effect of noise on visitor enjoyment at Aoraki/Mount Cook	1. Technical monitoring 2. Visitors' surveys	Determine acceptable noise levels, aircraft types, altitude levels, landing sites and aircraft corridors	Waitaki (Aoraki/Mount Cook National Park)

5.5.6 Environmental Protection

- avoiding, remedying and mitigating the adverse environmental effects of activities approved by the Department

Current Situation

Background

The guidelines set out in Environmental Protection and Enhancement Procedures (1987) were first introduced in the 1970s to provide for environmental impact assessments (EIA) of proposals on natural physical and human resources, where government approval, funding or resources were involved. The concept is now applied in many statutory situations.

For concessions under the Conservation Act, the EIA process is now a standard part of concession applications and is covered under 5.4.2 (Concessions General).

A concession for a very large proposal may, however, trigger the need for its environmental impact report (EIR) to be considered by the Parliamentary Commissioner for the Environment.

Other non-concession approvals by the Department such as under the Wild Animal Control Act (see 5.2.8 Pests and Wild Animals) or under the Freshwater Fisheries Regulations (see 5.2.4 Freshwater Ecosystems) do require EIAs.

The Department itself is also required to assess the environmental consequences of its actions, such as for new facilities and tracks.

Monitoring the effectiveness and performance of the EIA process has historically been poor. This needs to be investigated in two ways to evaluate approvals management. First, by approval assessment and monitoring to assess the environmental impacts of individual activities. Second, by policy monitoring to assess how well the Conservancy is managing environmental effects across a range of consent types, such as ski-fields (see 5.5.4 Survey and Monitoring).

Statutory Framework

The publication *Environmental Protection and Enhancement Procedures (1987)* outlines a set of administrative procedures set down by Government under a Cabinet directive. They determine whether an Environmental Impact Assessment or Report is necessary, and establish the process to be followed in producing and auditing any such assessment or report. The procedures apply to all proposals or actions on land managed by the Department, whether initiated by a government department or a private organisation or individual, to all approvals by the Department, and to all activities of the Department.

Sections 17S(1) and (3) of the Conservation Act set out the concession application requirements for providing adequate information and EIA (see 5.4.2 Concessions General). This specified process is an appropriate one to follow for non-concession approvals to meet the above EP & EP requirements.

Section 4 of the Resource Management Act provides an exemption for the Crown for land use consents on land managed by the Department where the proposed land use is provided for within the CMS or relevant CMP. Consents for other Resource Management Act activities (e.g. affecting water, discharges) will be required, if applicable. Non-Crown applicants for activities on land managed by the Department must comply with the consent requirements of current regional and district plans. The Resource Management Act's Fourth Schedule requirements for an assessment on effects on the environment may also apply in these cases.

Objective

- To require the preparation of appropriate environmental impact assessments (EIAs) supporting consent and concession applications, to identify, avoid, remedy and mitigate adverse effects.

Implementation

The Conservancy will:

1. Require applicants seeking statutory approvals in regard to land or natural and historic resources managed by the Department to provide an environmental impact assessment that adequately assesses adverse effects where the effects of the proposal are potentially significant or where a lack of knowledge exists. This includes the Conservancy's own consent applications for Department management programmes (under legislation and policy administered by the Department), or for other statutory approvals, such as under the Resource Management Act. Assessments of effects on the environment (AEE) prepared under the

Fourth Schedule of the Resource Management Act will generally be regarded as fulfilling the Department's EIA requirement, particularly where there has been consultation with the Department and its concerns have been addressed.

2. Require EIAs to be prepared for proposals initiated by itself or other persons where statutory approvals are not required but significant adverse effects on natural or historic resources are anticipated.
3. Advise proponents seeking statutory approvals to consult with appropriate Conservancy staff to outline the issues that the particular EIA needs to address before the application is submitted to the Conservancy.
4. Require each EIA prepared by the applicants for Conservancy assessment to be of appropriate detail, corresponding to the size, scale, impact and environmental effects of the proposal, before that application is accepted by the Conservancy. Substantial compliance with this implementation statement is a necessary prerequisite to the lodging of a proper application. Failure to provide adequate information will be grounds for refusal to consider a consent. The EIA should:
 - describe clearly the activity, its location and the status of the relevant land involved
 - identify those persons interested in or affected by the proposal, the consultation undertaken and any response to the views of those consulted
 - describe alternative sites or methods for the proposal, including those outside of lands managed by the Department
 - identify natural ecosystems and processes; and historic, cultural, landscape and recreational values including the values of natural quiet and natural darkness affected by the consent application
 - identify the beneficial and adverse effects of the proposal, directly and indirectly, as well as their short-term, long-term, and cumulative effects using sound scientific methods and data where possible
 - identify the probability of effects, along with their likely severity and magnitude
 - assess the environmental effects arising from abnormal operating conditions
 - suggest measures, including safeguard and contingency plans, where relevant, for mitigating predicted adverse effects, and the environmental consequences of implementing the mitigating measures
5. Release for public comment EIAs prepared by applicants with or before the release for public submissions (where required under statute) of the application.
6. Review EIAs prepared for Department proposals by person(s) independent of the project proponents.
7. Require monitoring of the adverse effects of any approved activities where the effects on the environment are more than minor. The costs of such monitoring shall be borne by the approval holder, who shall outline, in the application, a monitoring programme that identifies the following:
 - selected indicator variables for monitoring to adequately assess and aid mitigation of the short- and long-term effects of the activity
 - appropriate review periods for approval conditions
8. Require all applicants for Department approvals to identify other statutory approvals needed and to co-ordinate the necessary EIAs and AEEs.
9. Generally consider departmental approvals either prior to or jointly with other statutory approvals.
10. Liaise with and advise regional councils over section 4 of the Resource Management Act land use exemption provided by the CMS and relevant CMPs.
11. Apply for Resource Management Act land use consents where Department land use will cause significant external adverse effects external to the land managed by the Department.

Priorities

Primary

Ongoing statutory approvals will have the highest priority for EIA work. This is a commitment the department must meet under Cabinet directive.

Secondary

Non-statutory recreation management activity approvals (such as for the construction of Departmental facilities).

Less Achievable Tasks

Tasks that may not be undertaken or completed include the following:

- policy level EIA assessment
- studies to determine critical thresholds of effects for natural, historic and recreational management.

Key priority table not required.

6. CMS Administration

6.1 Plans and Functional Strategies

- preparing and reviewing plans and strategies to guide the Department's management

Background

Prior to 1990, individual management plans were required for all parks and reserves in the Conservancy. Some reserves have approved conservation management plans (CMPs) but, with the exception of national park plans, they are increasingly dated.

The Conservation Law Reform Act 1990 changed the requirements for management plans and established Conservation Management Strategies (CMSs) to serve as the primary planning documents for all land managed by the Department and all of its functions. Separate management plans are still required for Aoraki/Mount Cook and Arthur's Pass national parks.

Conservation Management Plans (CMPs)

This section applies only to conservation management plans for areas managed by the Department. For other areas see 5.5.2 (Statutory Land Management).

The purpose of conservation management plans is to implement the CMS and establish detailed objectives for the integrated management of natural and historic resources within an area, and for recreation, tourism and other purposes (section 17D of the Conservation Act 1987).

Conservation management plans are not required unless the intention to prepare them is identified within a CMS. An operative CMS may also make provision for additional CMPs.

Functional Strategies

As well as the CMS and CMPs, there are other types of non-statutory documents, such as functional strategies, that may be prepared in the Conservancy. These plans provide a greater level of detail than this CMS.

The functional strategies, such as the recreation and public awareness strategies, define how those specific issues are to be dealt with throughout the Conservancy. Draft functional strategies under preparation will develop and refine CMS objectives.

Wild Animal Control Plans

Wild animal control plans are required for recreational hunting areas (RHAs), established under section 27 of the Wild Animal Control Act 1977. Two such areas exist in the Conservancy – the Oxford and Lake Sumner RHAs, and both have control plans.

(see 5.2.8 Pests and Wild Animals)

Plans can also be prepared relating to specific wild animals and their control. The Himalayan thar control plan (1993) affects the southern Canterbury high country. A national deer control plan is in preparation.

Freshwater Fisheries Management Plans

While no freshwater fisheries management plans yet exist in the Canterbury Conservancy, the Department may prepare them for one or more freshwater fish species (other than sports fisheries) within any area or areas.

Current Situation

The current management and functional plan situation in the Conservancy is:

- the Mount Cook National Park management plan (1989) requires a full review by 1999
- the Arthur's Pass National Park management plan (1995) was approved in 1994 and requires amendments to incorporate the addition of the Cox-Binser area
- the Loch Katrine Recreation Reserve management plan has been finalised
- a large number of plans of the former Department of Lands and Survey, New Zealand Forest Service, and

New Zealand Wildlife Service remain operative, but are largely outdated. Those that cover conservation areas have effect only to the extent that they are consistent with the Conservation Act.

- three wild animal control plans are due for review:
 - Lake Sumner recreational hunting area wild animal control plan (1986)
 - Oxford recreational hunting area wild animal control plan (1982)
 - Himalayan thar control plan (1993)
- four functional strategies have been prepared:
 - Recreation Strategy for Canterbury Conservancy (1994)
 - Draft Interpretation Strategy: Canterbury Conservancy 1991-2001 (1991)
 - Conservation connections: Canterbury Conservancy public awareness strategy (1995)
 - Historic Resources Strategy: Canterbury Conservancy (1998)
- two functional strategies are being prepared:
 - Canterbury Conservancy threatened plants strategy
 - Canterbury Conservancy draft weed control strategy

Statutory Framework

Under section 17E of the Conservation Act 1987, conservation management plans (CMPs) shall be prepared if their preparation is required by the provisions of a conservation management strategy. A plan may relate to any area or areas managed by the Department under the following Acts:

- Wildlife Act 1953
- Marine Reserves Act 1971
- Reserves Act 1977
- Marine Mammals Protection Act 1978
- Conservation Act 1987

Management plans prepared by the New Zealand Forest Service, Department of Lands and Survey or New Zealand Wildlife Service may (by section 65(12) of the Conservation Act) be replaced, withdrawn or reviewed for conservation areas and may (by section 40A(4)(b) of the Reserves Act 1977) be revoked for reserves.

Wild animal control plans are provided for in sections 5(1)(d) and 28 of the Wild Animal Control Act 1977. Functional strategies have no specific statutory provisions but arise as a method whereby the Department can implement its functions under section 6 of the Conservation Act.

Freshwater fisheries management plans arise from section 17J of the Conservation Act 1987. They must have regard to any sports fish and game management plan having effect in the area.

Objectives

- To maintain, review and amend management plans for Aoraki/Mount Cook National Park, Arthur's Pass National Park and Loch Katrine Recreation Reserve to integrate management within those areas.
- To withdraw or revoke all other CMPs prepared by agencies disestablished on the formation of the Department for land managed by the Department.
- To prepare, review and amend management plans where the conservation of significant natural and historic resources would benefit from a CMP being prepared.
- To prepare and review wild animal control plans where needed to direct the control of wild animals or manage recreational hunting areas.
- To prepare, maintain and review Conservancy functional strategies to provide detailed direction in functional areas and to provide a focus for management and advocacy.
- To prepare, maintain and review freshwater fisheries management plans where needed to provide detailed direction in freshwater fisheries management.

Implementation

The Conservancy will:

1. Maintain, amend and review management plans under sections 45-48 of the National Parks Act 1980 and under sections 17E, G and I of the Conservation Act 1987 as appropriate for the following:
 - Aoraki/Mount Cook National Park
 - Arthur's Pass National Park
 - Loch Katrine Recreation Reserve
2. Produce CMPs where all of the following are met:

- the rate and scale of changes to the use and management of natural and historic resources are significant on a Canterbury scale
 - a management plan is required to address the impacts identified
 - a management plan would be the most effective and efficient management technique to manage the impacts identified above.
3. Treat all management plans for land managed by the Department, except those in Implementations 1 and 2 above, as inoperative and of advisory value only. Land under the management of the Department shall be managed in accordance with appropriate legislation and the objectives and implementation statements in this CMS.
 4. Withdraw or revoke (under section 65 (12)(c) of the Conservation Act, or section 40(4)(b) of the Reserves Act) all CMPs (other than those in Implementation 1) prepared by the former Department of Lands and Survey and the Wildlife Service under section 41 of the Reserves Act 1977, by the Department of Lands and Survey under Crown Land Policy, or by the New Zealand Forest Service under sections 26 and 63C of the Forests Act.
 5. Manage any areas added to the Arthur's Pass National Park, Aoraki/Mount Cook National Park, Loch Katrine Recreation Reserve, or any other land managed by the Department (subsequent to the approval of a CMP), in accordance with the relevant objectives and policies in that plan until such time as that plan is amended or reviewed to specifically include such areas.
 6. Consider reviewing the RHA wild animal control plans after the outcome is known on the national deer control plan.
 7. Review, prepare, upgrade or consider functional strategies for the Conservancy to provide detailed direction (not inconsistent with this CMS or any CMP) in the following areas:
 - public awareness
 - ecosystems
 - fencing
 - species
 - historic resources
 - animal pests and wild animals
 - plant pests
 - recreation
 - interpretation
 8. Consult with the Canterbury/Aoraki Conservation Board in the preparation and review of all functional strategies. Their advice to the Conservancy will also be sought once associate groups' comments have been received and summarised.
 9. Prepare all functional strategies in draft form and invite comments from relevant statutory bodies, associates and interest groups.
 10. Regularly review functional strategies to maintain their consistency with the CMS and in response to changed conservation priorities.
 11. Only consider freshwater fisheries management plan or plans, should the criteria in Implementation 2 above apply to a particular freshwater fishery, area or species.

Priorities

Over the next ten years, Conservancy will focus on:

- reviewing the Mount Cook National Park Management Plan (a full review is required by 1999)
- maintaining and reviewing functional strategies to help implementation and review of CMPs and the CMS

Less Achievable Tasks

Tasks which may not be undertaken or completed include:

- preparing management plans for conservation parks
- preparing management plans for significant nature, scientific, wildlife and scenic reserves

6.2 CMS Implementation

- implementing the CMS through the processes of the Conservancy and the conservation boards

Background

The purpose of a CMS is to integrate the management of land and species managed by the Conservancy. This section sets out:

- how the Conservancy's annual business planning will implement the CMS
- how the Conservancy will monitor the achievement of CMS key priorities and objectives
- how the Canterbury/Aoraki Conservation Board will advise the Conservancy and the New Zealand Conservation Authority (NZCA) on the implementation of the CMS
- when and how reviews or amendments will be considered
- how areas of land will be managed in accordance with the CMS and through the provision of by-laws and regulations

Business Planning

The CMS will be implemented through the Conservancy business plan (prepared under section 41(2)(d) of the Public Finance Act). The business plan covers twelve months from July to June and serves as a contract between the Conservator and the Director-General. The Conservancy business plan is part of a broader contract between the Director-General and the Minister.

Business plans determine priority conservation management and advocacy work and allocate staff time and money for that year. Business plans will accord with the direction of the government and national priorities and be consistent with the CMS and CMPs.

Monitoring

Monitoring is required to ensure that the CMS is being effectively administered and that the provisions of the strategy are still current and best serving the Conservancy's needs.

Monitoring of business plans is provided through four-monthly and yearly monitoring reports prepared by the Conservancy. These reports will form part of the accountability mechanism to report on CMS implementation.

One of the functions of the Canterbury/Aoraki Conservation Board is to advise on the implementation of the CMS. The Conservancy and Board will establish a process that enables them to advise on CMS implementation.

Reviews and Amendments

Procedures for reviewing and amending the CMS are provided for in sections 17H and 17I of the Conservation Act. These procedures are the same as those for preparing and approving the CMS as set out in section F of the Act:

- A review of the strategy as a whole or in part may be initiated at any time by the Director-General after consultation with the Canterbury/Aoraki Conservation Board. The full strategy must be reviewed no later than ten years after it is approved, although the Minister may extend this period.
- The Director-General may initiate amendments at any time after consulting with the Conservation Board. Every amendment must be carried out in accordance with section 17F of the Conservation Act.
- When the Director-General considers the proposed amendment will not materially affect strategy objectives or policies, a more simple process may be used. In this case paragraphs (k) and (p) of section 17F will apply and formal public consultation will not be required.

By-laws and Regulations

The CMS cannot affect the legal rights or powers of any person other than the Minister or Director-General of Conservation, or any Fish and Game Council. To enable specific controls to implement and enforce the use (by other people) of land or resources managed by the Department, by-laws or regulations are required in addition to statutory powers. These are provided for under the following Acts:

- regulations under section 123 of the Reserves Act 1977
- regulations under section 48 of the Conservation Act 1987

- by-laws under section 56 of the National Parks Act 1980 and section 106 of the Reserves Act 1977
- regulations under section 20 of the Walkways Act 1990
- regulations under section 72 of the Wildlife Act 1953

Objectives

- To implement the Canterbury CMS through business plans that co-ordinate and prioritise the direction of Conservancy management and advocacy.
- To amend or review the Canterbury CMS to ensure it is current and effective.
- To prepare appropriate by-laws and regulations to implement this CMS.
- To monitor the CMS via a CMS monitoring document and business planning reporting.
- To report to the Conservation Board annually on the Conservancy's achievements of CMS place and activity priorities.

Implementation

The Conservancy will:

1. Collect, review and update resource information relevant to the management of natural, historic and recreational resources in the Conservancy relevant to CMS and management planning.
2. Prepare Conservancy annual business plans with regard to the provisions of the CMS.
3. Provide copies of the four-monthly and yearly business planning reports to the Canterbury/Aoraki Conservation Board for it to advise on CMS implementation.
4. Prepare, in consultation with the Canterbury/Aoraki Conservation Board, and consistent with any national guidelines developed by the NZCA and the Department, a CMS monitoring document that outlines which performance indicators will be reported on to evaluate conservancy achievement of CMS objectives.
5. Meet with the Canterbury/Aoraki Conservation Board annually (or more frequently) to enable boards to advise and consult on:
 - business planning and CMS implementation performance
 - priorities for business planning
 - long-term progress in implementing the Canterbury CMS
6. Prepare, maintain, amend and review the Canterbury CMS under sections 17D, F, H and I of the Conservation Act 1987. The strategy will be amended or reviewed when:
 - required by the Director-General of Conservation as advised by the Canterbury/Aoraki Conservation Board
 - legislation, general policy or government directions represent a significant departure from the provisions of the CMS
 - monitoring indicates that the provisions in the strategy are impractical or have been superseded by new information
 - new information needs to be addressed and an amendment or review would be the most effective and efficient technique
7. Review this CMS no later than ten years after it is approved by the NZCA.
8. Manage, in accordance with the relevant objectives and implementation statements, additions to land managed by the Department subsequent to the approval of the CMS, until such time as the CMS is amended or reviewed to specifically include such areas.
9. Seek by-laws and regulations as required to protect the Conservancy's natural, historic and recreational resources from adverse effects. The following Acts are relevant:
 - sections 106 and 123 of the Reserves Act 1977
 - section 56 of the National Parks Act 1980
 - section 48 of the Conservation Act 1987
 - section 20 of the Walkways Act 1990
 - section 72 of the Wildlife Act 1953
10. Prepare an annual report to the Canterbury/Aoraki Conservation Board detailing the Conservancy's progress in achieving the CMS monitoring document's performance indicators.

Priorities

- Business planning
- CMS monitoring

Less Achievable Tasks

Tasks which may not be undertaken or completed include:

- the gathering of comprehensive resource information to a highly detailed level if resources are limited
- reviewing the Conservation Management Strategy prior to ten years after approval if resources are limited
- introducing by-laws and/or regulations to assist with the implementation of this strategy if this has a low Government priority

Glossary

A

access on foot only, unless otherwise qualified.

(public)

access strip as defined in the Resource Management Act 1991.

advocacy the collective term for work done to promote conservation to the public and outside agencies by the Conservation Department, conservation boards and the New Zealand Conservation Authority. Advocacy includes taking part in land use planning processes and using a range of methods to inform and educate the public and visitors on conservation issues.

aircraft as defined in the Civil Aviation Act 1964.

aircraft landing includes the hovering of any aircraft and the setting down or taking on of goods or persons from an aircraft. (section 17ZF Conservation Act 1987)

area office a public office of the Department, as shown on Map 1.

aruhe fern root.

amend in relation to conservation management strategies, conservation management plans, freshwater fisheries management plans and sports fish and game management plans, means any change that does not affect the objectives of the strategy or plan. Such a change may not require a full public process. (Conservation Act 1987)

amenity values those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes. (Resource Management Act 1991)

animal any member of the animal kingdom other than a human. (*Conservation Act 1987*)

aranui pathway, the travelling in set patterns through set areas.

archaeological site

any place in New Zealand that either (a) was associated with human activity that occurred before 1900; or (b) is the site of the wreck of any vessel where that wreck occurred before 1900; and may be able to provide evidence relating to the history of New Zealand through investigation by archaeological methods. (Historic Places Act 1993)

associates collective term for the groups, listed in Table 2, with whom the Department relates to achieve conservation gains.

Atawhai Ruamano/Conservation 2000

the Department's strategic planning process, designed to ensure that the Department is effective in achieving its long-term outcomes.

awa river.

B

backcountry experience

an outdoor recreation opportunity that may be influenced by human elements but there is an equal probability that users will be isolated from sights and sounds created by humans. There will be good opportunities for interaction with nature, challenge, risk and the use or learning of outdoor skills. (*The New Zealand Recreation Opportunity Spectrum: Guidelines for Users*. Taylor, 1993)

biodiversity/biological diversity

the variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part. This includes diversity within species, between species and of ecosystems. (*United Nations Conference on Environment and Development*. 1992)

biological community

a group of plants or animals of distinctive character related to a particular set of environmental requirements. The term is used in a general, collective sense.

biomass weight of living material.

bioprospecting

assaying for biologically active compounds.

biota	plants and animals.
boat	any vessel used in navigation, however propelled. (Reserves Act 1977)

C

coastal environment

an environment in which the coast usually is a significant part or element. The extent of the coastal environment will vary from place to place depending on how much it affects or is directly affected by coastal processes and the management issue concerned.

coastal marine area

the foreshore, seabed and coastal water and airspace above the water. (Resource Management Act 1991)

community (biotic)

a recognisable group of plants and animals living together in one place.

concession or concession document

a concession is a lease, easement, licence or permit granted under Part IIIB of the Conservation Act 1987 and includes any activity authorised by the concession document. (section 2 Conservation Act 1987)

concessionaire

as defined by section 2 of the Conservation Act 1987.

Conservancy all the land within the boundaries on Map 1, including both land managed by the Department and lands of all other tenures and the seabed out to 22.5 kilometres.

conservation (in respect of conservation areas)

the preservation and protection of natural and historic resources for the purpose of maintaining their intrinsic values, providing for their appreciation and recreational enjoyment by the public and safeguarding the options for future generations. (Conservation Act 1987)

conservation (in relation to historic places and areas)

the process of preserving, maintaining and restoring historic places and historic areas so as to safeguard their historical and cultural values.

Conservation area

all land, foreshore and interest in land held under the Conservation Act 1987.

conservation boards

there are 14 regional conservation boards, each comprising 12 appointed members. Their functions include overseeing the preparation of the conservation management strategies and national park management plans for their area, approval of conservation management plans (e.g. for Forest Parks), advising the New Zealand Conservation Authority or Director-General of the Department of Conservation on regional conservation matters and advising on new walkways in the region. (Conservation Act 1987)

Conservation Management Plan (CMP)

a plan for the management of natural and historic resources, and for recreation, tourism and other conservation purposes that implements the conservation management strategy and establishes detailed objectives for integrated management within any area or areas specified in a conservation management strategy. (section 17E of the Conservation Act 1987)

Conservation Management Strategy (CMS)

a document that implements general policies and establishes objectives for the integrated management of natural and historic resources including species managed by the Department. (Conservation Act 1987)

conservation plan

a document that outlines the cultural significance of a historic place and specifies the nature of the physical works to be undertaken in order to conserve it.

Conservator means Conservator Canterbury Conservancy

consultation a genuine invitation to give advice and genuine consideration of that advice. Recent case law defined the elements of successful consultation. (*Wellington International Airport Ltd v. Air New Zealand* [1991] NZLR 671 Court of Appeal). The case found that consultation can be summarised as including:

- a statement or proposal not yet finally decided
- listening to what others have to say and considering responses
- sufficient time and genuine effort

- enough information to make useful and intelligent responses
- an open mind and readiness to change and start afresh
- an intermediate situation involving meaningful discussion

covenants as defined under the Reserves Act 1977, Conservation Act 1987, or QEII National Trust Act 1977.

Coastal Resource Inventory (CRI)

an ongoing programme undertaken by the Department of Conservation to identify important physical, biological and human resources in the coastal zone. The programme is organised into First, Second and Third Order Surveys.

Crown Land as defined in the Land Act 1948.

cultural societal values with an emphasis on New Zealand/European history and Maaori tikanga.

cultural landscape

a landscape that has been influenced or changed by humans, and includes historic and spiritual values and land use practices.

D

Department the Department of Conservation.

Deed of Recognition

a deed of recognition entered into by the Crown pursuant to the Deed of Settlement (Ngāi Tahu Claims Settlement Act 1998)

designation as defined by section 166 of the Resource Management Act 1991.

Director-General

the Director-General of Conservation.

District Plan an operative plan approved by a territorial authority under the Resource Management Act 1991, the purpose of which is to promote the sustainable management of natural and physical resources.

E

ecological district

one of the major levels used for the ecological classification of land. New Zealand has been divided in 268 ecological districts according to geological, topographical, climatic and biological features and processes, which interrelate to produce characteristic landscapes and ranges of biological communities. (*The New Zealand Protected Natural Areas Programme*. Kelly and Park, 1986)

ecology the study of organisms in relation to one another and to their surroundings.

ecosystem a biological system comprising a community of living organisms and their environment involved together in a process of living. There is a continuous flow of energy and matter through the system. The concept implies process and interaction. Ecosystems range in size from small freshwater ponds to Earth itself.

effect as defined in section 3 of the Resource Management Act 1991.

endangered a plant or animal in danger of extinction whose survival is unlikely if the causal factors continue. (*The Red Data Book of New Zealand*. Williams and Given, 1981)

endemic species of plants and animals that are unique to an area or animals that may migrate but breed only in the area. (*The Red Data Book of New Zealand*. Williams and Given, 1981)

environment includes (a) ecosystems and their constituent parts, including people and communities; and (b) all natural and physical resources; and (c) amenity values; and (d) the social, economic, aesthetic and cultural conditions that affect the matters stated in (a) to (c) of this definition or that are affected by those matters. (Resource Management Act 1991)

esplanade reserve

a local purpose reserve usually 20 metres wide, vested in the territorial authority or in the Crown with the purposes of protecting conservation values, enabling public access to or along the sea, a river or lake and recreational use, where this is compatible with conservation values. Usually created as a result of subdivision of private land. Refer marginal strips. (Resource Management Act 1991, Reserves Act 1977)

esplanade strip

as in section 229 of the Resource Management Act 1991, Reserves Act 1977.

estuary a broad tidal area associated with a river where there is a mixing of saline and freshwater. (New Zealand Coastal Policy 1994)

eutrophic rich in organic and mineral nutrients and supporting abundant plant life (such as algae) that, in the process of decaying, depletes the oxygen supply for animal life.

exploration(in relation to mining) sampling to determine the feasibility of mining.

F

fauna animal life of a place or time.

Fish and Game Council

statutory body responsible for the management of sports fish and game, and their habitats. (Conservation Act 1987)

fishery one or more stocks of species of freshwater fish or aquatic life that can be treated as a unit for the purpose of conservation or management. (Conservation Act 1987)

flora plant life of a given place or time.

foreshore shore between high and low water marks at mean spring tides. (Conservation Act 1987)

Forest Heritage Fund

a nationally contestable fund established by Government in 1990 to help fund the voluntary and permanent protection of indigenous forest and associated vegetation on private land.

forest parks parks managed under section 61(2) of the Conservation Act, e.g. Craigieburn Forest Park, and deemed to be conservation parks.

freshwater fish

species of finfish (classes Agnatha and Osteichthyes) and shellfish (classes Mollusca and Crustacea) that spend all or part of their life histories in freshwater.

freshwater as defined in the Conservation Act 1987.

functional strategy

strategic assessment for a single function of the Department over a wide geographic area. For example, conservancy recreation strategies.

G

game animal any game bird (duck, geese) (as in the first schedule of the Wildlife Act 1953), wild animal (as in the Wild Animal Control Act 1977), rabbit or hare.

General Policy

a guide for decisions based on general approaches. General Policy is used to mean a statement, directive or guide adopted by the Minister of Conservation, or the New Zealand Conservation Authority following a statutory process under the Conservation Act, National Parks Act, Reserves Act, Wildlife Act, Marine Reserves Act, Wild Animal Control Act, Marine Mammals Protection Act and the New Zealand Walkways Act. Conservation management strategies are required to implement statements of General Policy. (*Management Planning Guidelines*. Department of Conservation, 1991)

H

habitat the environment in which a particular species or group of species lives. It includes the physical and biotic characteristics that are relevant to the species concerned. For example, the habitat of the blue duck consists of swift water with an abundance of freshwater insects.

hāpu sub-tribe. (Waitangi Tribunal 1991)

heritage inherited circumstances or benefits with an emphasis on nature conservation, historic and cultural values.

heritage order

as defined in section 187 of the Resource Management Act 1991.

historic values attached to a historic resource (see historic resource)

historic area an area of land that (a) contains an inter-related group of historic places; and (b) forms part of the historical and cultural heritage of New Zealand; and (c) lies within the territorial limits of New Zealand. (Historic Places Act 1993).

historic resource

a historic place within the meaning of the Historic Places Act 1993. Includes any interest in a historic place. (Conservation Act 1987)

historic place any land, (including any archaeological site) building or structure that forms part of the historical and cultural heritage of New Zealand and is within the territorial limits of New Zealand. Includes anything fixed to this land. (Historic Places Act 1993)

I

implementation provisions

specific statements on how objectives are to be achieved, which may include criteria for assessment.

inanga/inaka whitebait.

indigenous as defined in the National Parks Act 1980.

indigenous biodiversity

diversity within indigenous species, between indigenous species and diversity of the indigenous component of ecosystems.

integrate bring together.

integrated management

the management of activities, existing or potential, in a manner which ensures that each is in harmony with the other and that priorities are clear.

International Council on Monuments and Sites (ICOMOS)

Established by UNESCO to set world standards for cultural heritage preservation.

International Union for the Conservation of Nature and Natural Resources (IUCN)

the World Conservation Union, based in Geneva. Comprises governmental and non-governmental organisations.

interpretation

conveying information about the origin, meaning or values of national or cultural heritage via live, interactive or static media. It occurs in the vicinity of the subject and is designed to stimulate visitor interest, increase understanding and promote support for conservation.

intrinsic values

this is a concept that regards the subject under consideration as having value in its own right, independent of any value placed on it by humans. Elements of intrinsic value in relation to ecosystems means those aspects of ecosystems and their constituent parts that have value in their own right, including their biological and genetic diversity and the essential characteristics that determine an ecosystem's integrity, form, functioning and resilience.

invertebrates animals without backbones – including snails, insects, worms etc.

iwi tribe, people. (Waitangi Tribunal, 1991)

K

kaitiakitanga/kaitiakitaka

the exercise of guardianship by the tāngata whenua of an area in accordance with tikanga Māori in relation to natural and physical resources; and includes the ethic of stewardship. (Resource Management Act 1991)

kaupapa fundamental principles, strategy.

kawanatanga European government powers and systems.

L

Land Acquisition Fund

a departmental fund that is used to meet costs associated with the establishment of statutory protection over areas of private and Māori land.

land managed by the Department

all land held, managed or administered under the Conservation Act and other acts administered by the Conservation Department (refer First Schedule of the Conservation Act 1987).

landscape the reflection of the cumulative effects of physical and cultural processes.

land status legal protection given to land by the Act under which it is reserved.

land includes foreshore, and land covered by water and the air space above land.

lease a grant of an exclusive interest in land that (a) gives exclusive possession of the land and (b) makes provision for any activity on the land that the lessee is permitted to carry out. (Conservation Act 1987)

licence (a) a *profit a pendre* or any other grant that gives a non-exclusive interest in land or (b) a grant that makes provision for any activity on the land that the licensee is permitted to carry out. (Conservation Act 1987)

local authority

any regional or district council or unitary authority.

M

McLean Scale measures rabbit infestation on a scale of 1 to 5.

mahinga kai/mahika kai

traditional places for gathering food and other resources.

mahinga mātaitai

area set aside for customary food-gathering by Māori under the Fisheries Act 1993.

mana authority, control, influence, prestige, power. (Waitangi Tribunal, 1991)

mana whenua customary authority exercised by an iwi or hapū in an identified area. (Resource Management Act 1991)

management planning

the process of setting and confirming objectives for the management of natural and historic resources, and recreation, tourism and other conservation purposes, and specifying the actions and resources necessary to achieve those objectives. (*Management Planning Guidelines*. Department of Conservation, 1991)

marginal strip

land reserved from disposition by the Crown under the Land Act 1948 and the Conservation Act 1987 along the foreshore, waterways greater than 3 metres wide (when not used by the Electricity Corporation of New Zealand for generating electricity) and lakes. This term also refers to land acquired in exchange for marginal strips. Marginal strips are 20 metres wide unless a reduction of width has been approved by the Minister. For more information refer to the Act. (Conservation Act 1987)

mauri physical life essence/force.

mesotrophic water with levels of plant nutrients intermediate between those of oligotrophic and entrophic waters.

mineral as defined in section 2(1) of the Crown Minerals Act 1991.

mining extraction of minerals, but may include prospecting and exploration.

mustelid a small carnivorous mammal belonging to the stoat, weasel or ferret family.

N

native as defined in the National Parks Act 1980.

natural see natural resources.

natural character

the qualities of an area that taken together give it a particular, recognisable character. These qualities may be ecological, physical, spiritual or aesthetic in nature.

natural darkness

the absence of light created by humans.

natural landscape

landscape not defined or influenced by humans and based on ecosystems, geological/physiographic features, ephemeral characteristics, climate etc.

naturalness the degree to which a place is characterised by indigenous species (see natural value). A high degree of naturalness occurs when there are few or no impacts from exotic species, including human impacts.

natural quiet the absence of noise created by humans.

natural resources

include plants and animals and their habitats, landscape and landforms, geological features, and systems of interacting living organisms, and their environment. (Conservation Act 1987)

natural value having importance for the presence of indigenous species or ecosystems, or unmodified landforms (see naturalness)

nature conservation

the preservation and protection of the natural resources of New Zealand, having regard to their intrinsic values and having special regard to indigenous flora and fauna, natural ecosystems and landscape. (Conservation Act 1987)

network utility

as defined in section 166 of the Resource Management Act.

New Zealand Coastal Policy Statement

as defined in section 57 of the Resource Management Act. (Gazetted 5 May 1994)

New Zealand Conservation Authority (NZCA)

a national body of 12 appointed members established under section 6A of the Conservation Act 1987. Amongst other functions, it has the statutory responsibility for approving General Policy, conservation management strategies and plans, and national park management plans. (Conservation Act 1987)

New Zealand Fish and Game Council

a statutory body appointed by Fish and Game Councils to co-ordinate the management, enhancement and maintenance of sports fish and game. (Conservation Act 1987)

Ngā tūpuna maunga

the ancestral mountains

Ngā Whenua Rāhui

a fund established to facilitate the voluntary protection of indigenous forest on Māori-owned land.

Ngā Whenua Rāhui Kawenta

an agreement entered into under section 27A of the Conservation Act 1987.

niche (ecological)

Particular combination of site conditions where a species is found.

O

objectives statements of intended results. These can be broad or narrow in scope and should be accompanied by implementation provisions. (*Management Planning Guidelines*. Department of Conservation, 1991)

oligotrophic poor in nutrients and plant life and rich in oxygen.

P**Papatipu Rūnanga**

traditional Ngāi Tahu rūnanga. (Te Runanga o Ngai Tahu Act 1996)

permit a grant of rights to undertake an activity that does not require an interest in land. (Conservation Act 1987)

pingao golden sand sedge.

plant any member of the plant kingdom, including any alga, bacterium or fungus, and any part of or seed or spore from any plant. (Conservation Act 1987)

predation to prey upon, to search out to kill.

preservation in relation to resources under the Conservation Act 1987, means the maintenance, so far as is practicable, in their current state but includes restoration to some former state and augmentation, enhancement or expansion. (Conservation Act 1987)

prospecting initial survey with hand-held methods.

protected areas

land or sea administered for protection of flora or fauna or for scientific purposes. It does not include amenity areas, recreation, local purpose and some government purpose reserves.

Protected Natural Areas Programme (PNAP)

a programme that aims to identify and protect a network of Protected Natural Areas (PNA) that are representative of the full range of New Zealand's natural diversity. Ecological districts are surveyed and areas identified that are the best representative examples of each ecosystem. These are termed 'recommended areas for protection' or RAPs.

Protected Natural Area System

all areas protected by a variety of means for their natural values.

protection in relation to a resource, means its maintenance, as far as is practicable, in its current state; but includes (a) its restoration to some former state; and (b) its augmentation, enhancement, or expansion. (Conservation Act 1987)

public notice/notification

as required under the Conservation Act and other Acts in the 1st Schedule.

R

rangatiratanga, te tino rangatiratanga

rights of autonomous self-regulation, iwi to make decision and control resources.

rare

species with small world populations that are not at present endangered or vulnerable but are at risk. (*Setting priorities for the conservation of New Zealand's threatened plants and animals*. Molloy, Davis and Tisdall, 1994; *The Red Data Book of New Zealand*. Williams and Given, 1981)

Recommended Area for Protection (RAP)

a place identified as a priority for protection because it contains the best example(s) of its type or class of natural ecosystem and/or landscape in an ecological district. (*The New Zealand Protected Natural Areas Programme*, Kelly and Park, 1986.)

recreation the way in which a person chooses to spend time that is free and is apart from work and other tasks involved in providing and maintaining a livelihood.

Recreational Hunting Area (RHA)

an area set aside for recreational hunting under the Wild Animal Control Act 1977.

Recreation Opportunity Spectrum (ROS)

a system for classifying outdoor experiences. It identifies opportunities along a continuum from urban to wilderness. It has eight main categories and provides both an inventory and planning process.

recreation facilities

includes tracks, walks, picnic areas, camping grounds, shelters, huts, bivouacs and toilets. (*Recreation Strategy for Canterbury Conservancy*. Department of Conservation, 1994).

refugia

places where species that were formerly more widespread survive following severe habitat modification.

regional plans

the purpose of these is to assist regional councils and unitary authorities to carry out their functions. They are designed to address specific resource management issues for which regional councils and unitary authorities are responsible. Councils must decide what regional plans they will prepare. Plans may cover matters such as water management, soil conservation, natural hazard mitigation and air pollution. (see regional policy statements). (Resource Management Act 1991)

regional policy statements

these set out the objectives for managing resources and are prepared by regional councils and unitary authorities in accordance with the Resource Management Act 1987. They provide the overall framework for achieving sustainable management in the region and are binding on regional and district plans. (Resource Management Act 1987, Regional Policy Statements and Plans, Ministry for the Environment)

rehabilitation to return a degraded ecosystem or population to an undegraded condition, which may be different from its original condition.

relict (populations)

that which is left after all others have gone.

remote experience

an outdoor recreation opportunity in an area managed by the Conservancy in which any structures or tracks have been removed or not maintained.

resource consent

as defined in section 87 of the Resource Management Act 1991.

restoration returning a place as nearly as possible to a known earlier state by reassembly, reinstatement and/or the removal of extraneous additions. (*ICOMOS New Zealand Charter*. 1993)

restricted coastal activity

as defined in the Resource Management Act 1991.

review	in relation to conservation management strategies and management plans means to reconsider objectives and policies and, following a process of public comment, to approve a new strategy or plan, having regard to increased knowledge or changed circumstances. (Conservation Act 1987)
RM Act	Resource Management Act 1991.
road	access way designed primarily for motorised vehicles; including public roads and off-road vehicle tracks, but excluding paths designed for wheelchairs.
rohe	boundary, tribal region. (Waitangi Tribunal, 1991)
rūnanga/rūnaka	assembly, council. (Waitangi Tribunal, 1991)

S

savannah	a grass-dominated community with scattered trees or shrubs. Can occur naturally or be induced through burning and grazing.
seral	a phase in the sequential development of a climax community.
significance assessment	an assessment of the values of a historic place based on the criteria set out in section 23 of the Historic Places Act 1993.
Sites of Special Wildlife Interest (SSWI)	a list of areas identified by the former New Zealand Wildlife Service that provide important habitat for wildlife.
special area	any nature reserve, scientific reserve, wildlife sanctuary, wilderness area or national park.
specially protected areas	conservation parks, wilderness areas, ecological areas, sanctuary areas, watercourse areas as detailed in Part IV of the Conservation Act 1987.
species recovery plan	a plan of action intended to halt the decline of a threatened species and increase its population.
sports fish	introduced fish sought by freshwater anglers, mostly trout or salmon.
statutory acknowledgement	an acknowledgement made by the Crown in respect of a statutory area (Ngāi Tahu Claims Settlement Act 1998).
statutory adviser	Te Rūnanga o Ngāi Tahu in its role as an advisor to the Minister of Conservation (Ngāi Tahu Claims Settlement Act 1998).
stewardship area	a conservation area that is <i>not</i> a marginal strip, watercourse, conservation park, ecological area, sanctuary area or wilderness area, or land in which an interest is held under the Conservation Act 1987 for one or more of these purposes. (Conservation Act 1987)
strategic planning	an approach that analyses issues and develops policy or a course of action based on this analysis.
strategic	planned approach to a problem or issue.
sustainability, ecological	the use of the components of an ecosystem in ways that allow for the perpetuation of the character and natural processes of that ecosystem.
sustainable management	managing the use, development, and protection of natural and physical resources in a way or at a rate that enables people and communities to provide for their social, economic and cultural well-being and for their health and safety while (a) sustaining the potential of natural and physical resources (excluding materials) to meet the reasonable foreseeable needs of future generations, (b) safeguarding the life-supporting capacity of air, water, soil and ecosystems, and (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment. This definition is specific to the Resource Management Act 1991.

T

taiāpure	local fishery of special significance to iwi or hapū; set aside under the Fisheries Act 1983. Taiāpure is one way of managing local fisheries with involvement from iwi and local communities. This approach has the benefit of management by locals.

taking in relation to plants this includes breaking, cutting, destroying, digging up, gathering, plucking, pulling up and removing of the plant. In relation to fish it means fishing. (Conservation Act 1987)

tāngata whenua/tākata whenua

in relation to a particular area, means the iwi, or hapū that holds mana whenua over that area. (Resource Management Act 1991)

taonga/taokavalued resources, treasures.

taxa species, subspecies or varieties.

tenure review the process of land tenure review under the Land Act 1948.

Te Wai Pounamu

the South Island.

territorial limit

limit of New Zealand's legal jurisdiction, 20 kilometres from the coast.

threatened, (species)

a term used to mean vulnerable or more loosely used to include rare, vulnerable and endangered species. (*Setting priorities for the conservation of New Zealand's threatened plants and animals*. Molloy and Davis and Tisdall, 1994)

territorial relating to land.

tikanga Māori customary values and practices. (Resource Management Act 1991)

Tōpuni an area of land that is managed by the Department, has Ngāi Tahu values, and is declared as Tōpuni under, and on the terms of the Ngāi Tahu Claims Settlement Act, 1998.

tourism organised touring, operation of tours as a business; provision of things and services that attract tourists.

tourist person who makes a tour, traveller, especially for recreation.

traditional site

a place or site that is important by reason of its historical significance or spiritual or emotional association with Māori. (Historic Places Act 1980)

Treaty the Treaty of Waitangi.

tuna eel(s)

U

urupā cemetery, burial ground. (Waitangi Tribunal Report, 1991)

unit of land individual parcel of land that the Department manages.

V

vector carrier of disease or infection.

vehicle as in the Transport Act means (in paraphrase) anything with wheels or runners that moves or is moved.

visitors visitors are people who visit lands managed by the Department for recreation; participating in activities for personal satisfaction, interest or enjoyment. Visitors include adults and children, from both New Zealand and overseas, and they may either arrange their own visit or use the services of a concessionaire. The term 'user' can also be used to described 'visitor'.

vulnerable a plant or animal believed likely to move into the endangered category in the near future if the causal factors continue. (*The Red Data Book of New Zealand*. Williams and Given, 1981)

W

wāhi tapu place sacred to Māori in the traditional, spiritual, religious, ritual or mythological sense. (Historic Places Act 1993)

wairua life principle.

walkway an area of land that has been declared a walkway or an area of land over which a walkway has been established under the New Zealand Walkways Act 1990.

water in all its physical forms and includes freshwater, coastal water and geothermal water.

Water Conservation Order (WCO)

made to recognise and sustain those characteristics of a water body that affords outstanding amenity or intrinsic values. They are made by the Minister for the Environment on the recommendation of a special tribunal and/or the Planning Tribunal. (Resource Management Act 1991)

- weapon** as defined in the Trespass Act 1980.
- wetland** permanently or intermittently wet areas; shallow water and land-water margins. Wetlands may be fresh, brackish or saline, and are characterised in their natural state by plants or animals that are adapted to living in wet conditions. (NZ Wetlands Management Policy 1986)
- Wetlands of Ecological and Representative Importance (WERI)**
a register of ecologically important wetlands.
- wilderness area**
as defined in the National Park Act 1980, Conservation Act 1987 and Reserves Act 1977.
- wild animal** a statutory definition set out in section 2 of the Wild Animal Control Act 1977. It includes: deer species, chamois, thar, wallaby and possum; as well as goats and pigs living in a wild state. It does not include these species where they are lawfully held in captivity. (Wild Animal Control Act 1977)
- wildlife** all animals that are living in a wild state; but does not include any animals of any species for the time being specified in the sixth Schedule to the Wildlife Act 1953 ('wild animals'). (Conservation Act 1987)

Dialectal Note: In the dialect of Ngāi Tahu 'k' sometimes replaces 'ng', for example rūnaka (rūnanga), taoka (taonga).

Abbreviations

AMCNP	Aoraki/Mount Cook National Park	MFish	Ministry of Fisheries
APNP	Arthur's Pass National Park	MSC	Mountain Safety Council
AHB	Animal Health Board	NCFG	North Canterbury Fish and Game Council
ASCV	Area of Significant Conservation Value	NZAC	New Zealand Alpine Club
CAA	Civil Aviation Authority	NZCA	New Zealand Conservation Authority
CBD	Convention on Biological Diversity	NZCPS	New Zealand Coastal Policy Statement
CCC	Christchurch City Council	NZDF	New Zealand Defence Force
CCL	Commissioner of Crown Lands	NZHPT	New Zealand Historic Places Trust
CLE	Compliance and Law Enforcement	OSNZ	Ornithological Society of New Zealand
CMC	Canterbury Mountaineering Club	PNA(P)	Protected Natural Area (Programme)
CMP	Conservation Management Plan	PRR	Project River Recovery
CMS	Conservation Management Strategy	RHA	Recreational Hunting Area
CRC	Canterbury Regional Council	RMA	Resource Management Act
CSIFGC	Central South Island Fish and Game Council	RLMP	Rabbit and Land Management Programme
CSL	Crown Services Levy	ROS	Recreation Opportunity Spectrum
DC	District Council	SAR	Search and Rescue
DOC	Department of Conservation	SSWI	Site of Special Wildlife Interest
DOSLI	Department of Survey and Land Information	TB	Bovine Tuberculosis
ECNZ	Electricity Corporation of New Zealand	TNZ	Transit New Zealand
EEO	Equal Employment Opportunities	TRONT	Te Rūnanga o Ngāi Tahu
EIA	Environmental Impact Assessment	UCL	Unalienated Crown Land
EMC	Eel Management Committees	UIAGM	Union International des Association des Guides de Montagne
EP & EP	Environmental Protection and Enhancement Procedures	UNCED	United Nations Conference on Environment and Development
FGC	Fish and Game Council	VIN	Visitor Information Network
FWI	Fire Weather Index	WARS	Wild Animal Recovery Service
FORST	Foundation for Research, Science and Technology	WCO	Water Conservation Order
GIS	Geographical Information System	WERI	Wetland of Ecological and Representative Importance
ICOMOS	International Convention on Monuments and Sites	WII	Wetland of International Importance
IUCN	International Union for the Conservation of Nature		

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Appendix 1

Principles of the Treaty of Waitangi

Quotations from the Waitangi Tribunal and Court of Appeal that illuminate what the Treaty principles are presently understood to be.

The quoted principles below are a combination of non-statutory opinions contained in recommendations to Government by the Waitangi Tribunal and legal interpretations of the Treaty by the Court of Appeal.

1. The Essential Bargain

The Waitangi Tribunal:

‘[The Treaty of Waitangi represents] an exchange of gifts... The gift of the right to make laws, and the promise to do so as to accord the Māori interest an appropriate priority.’ (Waitangi Tribunal, 1989a, at p52.)

‘Rangatiratanga over a taonga denotes the mana of Māori not only to possess, but to control and manage it in accordance with their own cultural preferences.’

‘While the cession of sovereignty or kawanatanga enables the Crown to make laws for conservation control and resource protection, that right is to be exercised in the light of article 2 of the Treaty. It should not diminish the principles of article 2 or the authority of the tribes to exercise control. In short, the tribal right of self-regulation or self-management is an inherent element of tino rangatiratanga.’ (Waitangi Tribunal, 1993, at p136.)

The Court of Appeal:

‘...the basic terms of the bargain were that the Queen was to govern and the Māori were to be her subjects, in return their chieftainships and possessions were to be protected, but sales of land to the Crown could be negotiated.’ (*New Zealand Māori Council v. Attorney-General* [1987] 1 NZLR 641 at 663 per Cooke P, the *Lands Case*.)

Māori were ‘guaranteed possession of lands, forests, fisheries and other possessions, promised Crown protection and granted the rights of British subjects’. (*Lands Case* at p672 per Richardson J.)

2. Partnership

The Waitangi Tribunal:

‘The Treaty signifies a partnership between the Crown and the Māori people and the compact between them rests on the premise that each partner will act reasonably and in the utmost good faith towards the other.’ (Waitangi Tribunal, 1987, at p150.)

‘[The Treaty] was not intended to merely fossilise a status quo, but to provide a direction for further growth and development... the foundation for a developing social contract...’ (Waitangi Tribunal, 1989a, at p52.)

‘...neither partner in our view can demand their own benefits if there is not also an adherence to reasonable state objectives of common benefit. It ought not to be forgotten that there were pledges on both sides.’ (Waitangi Tribunal, 1989b, at p195.)

The Court of Appeal:

The Treaty requires that:

‘each party (would) act(s) reasonably and in good faith towards the other...’ (*Lands Case* at p80-681 per Richardson J.)

‘The relationship between Treaty partners creates responsibilities analogous to fiduciary duties’. (*Lands Case* at p665 per Cooke P.)

3. Duty To Be Informed

Court of Appeal:

‘The responsibility of one Treaty partner to act in good faith fairly and reasonably towards the other puts the onus on a partner, here the Crown, when acting within its sphere to make an informed decision’. (*Lands Case* at p683 per Richardson J.)

4. Active Protection

Waitangi Tribunal:

‘The Treaty of Waitangi obliges the Crown not only to recognise the Māori interests specified in the Treaty but actively to protect them.’ (Waitangi Tribunal, 1985, at p95.)

‘...the Treaty both assured Māori survival and envisaged their advance, but to achieve that in Treaty terms, the Crown had not merely to protect those natural resources Māori might wish to retain, but to assure the retention of a sufficient share from which they could survive and profit, and the facility to fully exploit them’. (Waitangi Tribunal, 1989b, at p194.)

Court of Appeal:

‘...the duty of the Crown is not merely passive but extends to active protection of Māori people in the use of their lands and waters to the fullest extent practicable’. (*Lands Case* at p664, per Cooke P.)

5. Avoid Prejudicial Actions

Court of Appeal:

‘...the obligation of the parties to comply with its terms is implicit... as in the law of partnership a breach of the terms of the Treaty by one of its parties gives rise to a right of redress by the other... – a fair and reasonable recognition of, and recompense for, the wrong that has occurred’. (*Lands Case* per Somers J.)

Appendix 2

Indigenous Species Priorities

Notes

Alphabetical rankings refer to the species' place in national priorities, according to Molloy, Davis and Tisdall (1994)

- A = Highest priority for conservation action
- B = Second priority for conservation action
- C = Third priority for conservation action
- O = Threatened in New Zealand but secure in range outside New Zealand
- I = Threatened but little information exists
- X = Species not sighted for some time but perhaps still in existence

References

- Cameron, E.K. *et al.* 1993. New Zealand Botanical Society Threatened and Local Plant Lists (revised). In *New Zealand Botanical Society Newsletter* 32:14–28.
- Molloy, J., Davis, A.M. and Tisdall, C. 1994. *Setting priorities for the conservation of New Zealand's threatened plants and animals*, 2nd edn. Department of Conservation, Wellington.

Invertebrates

Banks Peninsula tree weta

Hemideina ricta

Ranked nationally as Category B

1. Fragmentation of preferred forest/shrubland habitat
2. Predation by introduced mammalian predators

Mount Somers bluff weta

Deinacrida sp 'maungakoura'

Unranked nationally

1. Probably confined to bluff habitats inaccessible to introduced predators
2. Disjunct distributions

Speargrass weevil

Lyperobius buttoni

Ranked nationally as Category X

1. Little known of status and distribution
2. Habitats restricted by existing pastoral land use

Akaroa weevil

Megacolabus sculpturatus

Ranked nationally as Category X

Nothing known of status and distribution

Alpine scree weta

Deinacrida connectens

Unranked at present

Disjunct distribution suspected

Robust grasshopper

Brachaspis robustus

Ranked nationally as Category A

1. Disjunct distribution suspected
2. Depleted populations resulting from massive habitat modifications

Mount Cook weta

Deinacrida 'Mt Cook'

Ranked nationally as Category I

1. Taxonomy unclear
2. Status and distribution unclear

Reptiles

Scree skink

Oligosoma ottagense form waimatense

Ranked nationally as Category B

1. Disjunct distribution nationally
2. Probably under pressure from introduced mammalian predators

Long-toed skink

Oligosoma 'Long-toe'

Ranked nationally as Category B

1. Population status unknown
2. Distribution unknown

Striped skink

Oligosoma striatum

Ranked nationally as Category A

1. Fragmented populations as a result of habitat changes
2. Probably predated by introduced mammalian predators

Bats

Long-tailed bat/pekapeka

Chalinolobus tuberculatus

Ranked nationally as Category B

1. Small remnant populations in isolated pockets
2. Status and threats in Canterbury uncertain

Method**Results Sought****Place**

1. Clarify status and distribution 2. RMA advocacy	1. Science and Research Division of the Department of Conservation sponsored research into ecology and distribution. 2. Conservancy sponsored distribution survey.	Banks Peninsula; East of Akaroa Harbour – Banks Peninsula podocarp forest
1. Clarify status, taxonomy and distributions 2. RMA advocacy	1. Distribution, abundance and status clarified 2. Defined taxonomic distinctiveness from the Kaikōura weta, <i>D. 'Kaikōura'</i> 3. Protected habitat, managed to preserve or enhance species if necessary	Rangitata Mount Somers, Rangitata rocky bluffs
1. Clarify status and distribution 2. RMA advocacy	1. Existence determined 2. Sound basis for recovery established	Banks Peninsula – tussock grasslands
Clarify status and distribution	1. Existence determined 2. Sound basis for recovery established	Banks Peninsula tree ferns
Clarify distribution and status	1. Presence/absence clarified 2. Established abundance benchmarks to measure impacts of grazing and feral animals 3. Defined threats and means of mitigation	Rangitata/Waitaki Mount Hutt and Two Thumb Ranges – Mid-Canterbury mountain scree
1. Clarify distribution, status and ecology 2. RMA advocacy 3. Recovery plan to guide management	1. Clarified distribution, abundance and status 2. Mid- to long-term: self-sustaining populations	Waitaki Mackenzie Basin, Waitaki greywacke on riverbeds
Clarify distribution, status and taxonomy	1. Clarified distribution 2. Defined taxonomic distinctiveness 3. Managed under generic weta recovery programme	Rakaia and Aoraki/Mount Cook regions Rangitata, Waitaki
Clarify status and distribution in Canterbury	1. Clarified distribution 2. Defined threats and means of mitigation	Canterbury ranges Puketeraki, Hurunui, Waimakariri, Rangitata, Waitaki
1. Survey to clarify local population status and distribution 2. Incidental surveys to extend known distribution	1. Establish altitudinal distribution and abundance 2. Defined threats and means of mitigation	Waimakariri Craigieburn Range
Clarify status and distribution	1. Clarified distribution and status 2. Defined threats and means of mitigation	Canterbury
Monitor remaining population and roost sites	1. Short-term: location of population pockets established 2. Mid-term: status of population determined and established 3. Long-term: self-sustaining populations	Pareora South Canterbury

Species (and Ranking)**Issues****Birds**

Black stilt/kaki

Himantopus novaeseelandiae

Ranked nationally as Category A

1. Low productivity due to habitat modification and predation
2. Low number of wild breeding pairs
3. Habitat loss and modification

Great-spotted kiwi/roa

Apteryx haastii

Ranked nationally as Category B

Distribution and population trends unknown

Blue duck/kōwhiowhio

Hymenolaimus malacorhynchos

Ranked as Category B

1. Small restricted populations, possibly decreasing
2. Increasing recreational use of habitat areas may be having an adverse effect on breeding and distribution

Buff weka

Gallirallus australis bectori

Ranked nationally as Category B

Re-establish a population in Canterbury

Kererū/kūkupa native pigeon

Hemipbaga novaeseelandiae

Ranked nationally as Category B

Small restricted populations

White-flipped penguin/kororā

Eudyptula minor subsp. *albosignata*

Ranked nationally as Category B

Apparent decline in breeding colonies through predation by cats and mustelids

New Zealand falcon/kārearea

Falco novaeseelandiae

Ranked nationally as Category B

Status of population not known

Wrybill/ngutu-pare

Anarhynchus frontalis

Ranked nationally as Category B

1. Habitat modification
2. Recreational use of riverbeds impacting on breeding

Yellow-eyed penguin/hōiho

Megadyptes antipodes

Ranked nationally as Category B

Poor breeding success as a result of predation and habitat modification

Yellowhead/mohua

Moboua ocbrocephala

Ranked nationally as Category B

1. Historically large population now restricted to one or two small fragmented populations
2. Predation by mustelids

Southern crested grebe/kāmana

Podiceps cristatus australis

Ranked nationally as O

Increasing recreational use of lake habitat is impacting on productivity and the sustainability of the area as habitats

Method**Results Sought****Place**

1. Monitor populations to determine trends 2. Nest monitoring and manipulation to improve nest survival 3. Captive rearing 4. 'Pulse' release of large numbers of captive-reared individuals into the wild 5. Improve and restore habitat	1. Short-term: increased productivity, wild breeding pairs, and survival of remaining individuals in the population. 2. Mid-term: degraded habitat restored as much as possible 3. Long-term: self-sustaining population	Waitaki Mackenzie Basin
1. Survey all potential habitat areas to establish distribution 2. Establish and undertake monitoring programme to understand population trends	1. Short-term: surveyed to establish population distribution 2. Mid- to long-term: self-sustaining populations established	Arthur's Pass National Park, Lake Sumner, Lewis Pass, Hurunui, Waimakariri
1. Continue to monitor key areas in Arthur's Pass National Park and Peel Forest and recreation use 2. Establish what forms of recreation, if any, have an adverse effect on the species	1. Short-term: population monitoring researched 2. Mid-term: methods established to avoid, remedy or mitigate impacts of recreational use on key habitat riverbeds	Arthur's Pass, Lewis Pass, Peel Forest, Hurunui, Waimakariri
Work with Forest and Bird in their programme to re-establish weka on Banks Peninsula	1. Short-term: genetic analysis; assistance to Forest and Bird 2. Mid-term: population of weka established	Banks Peninsula Extinct on mainland
Investigate management needs of kereru	Mid-term: management needs established, if necessary	Banks Peninsula Puketeraki Waitaki Aoraki/Mount Cook
1. Undertake predator control as necessary. 2. Re-establish colonies as necessary 3. Determine the distribution of colonies and their status	1. Short-term: distribution and status of remaining colonies established; any further decline prevented 2. Mid- to long-term: self-sustaining populations.	Banks Peninsula Motunau Lowry
Build up information of distribution and status	Mid-term: distribution better understood	Hurunui Puketeraki Waimakariri Rangitata Waitaki - high country, foothills
1. Monitor population 2. RMA advocacy 3. Advocate the dangers to wrybills of recreational activities and implement ways to reduce these impacts 4. Ensure the riverbed habitat is maintained	1. Short-term: population trends monitored 2. Mid to long-term: impacts on breeding populations avoided, remedied or mitigated.	Waimakariri Plains Rangitata Waitaki - braided rivers
1. Monitor breeding 2. Protect nesting areas from predation and improve their suitability for breeding success	1. Short-term: determine what is required for successful breeding and implement 2. Mid- to long-term: improved breeding potential on Banks Peninsula	Banks Peninsula - coastline
1. Determine the size and location of fragmented populations 2. Investigate the dynamics of beech forest ecosystems - and the consequences of this to forest species 3. Develop effective predator control for beech forests	1. Short-term: populations within Canterbury determined 2. Mid- to long-term: predator and wild animal control systems developed	Hurunui - Lake Sumner beech forests Waimakariri - Arthur's Pass National Park
1. Determine the levels of recreational use and the degree of impacts 2. Monitor the use of all lake habitats and the grebe populations 3. RMA advocacy	1. Short-term: impacts of recreational use on grebes determined 2. Mid- to long-term: methods to avoid, remedy or mitigate recreational impacts on grebe populations implemented	Waimakariri Hurunui Rangitata Waitaki - high country lake systems Banks Peninsula - Lake Forsyth/ Wairewa

Species (and Ranking)**Issues**

Kea <i>Nestor notabilis</i> Ranked nationally as Category B	1. Kea damage to stock, equipment and facilities in the high country 2. Poor understanding of kea population dynamics and size 3. Changing the public's perception of kea – once considered a pest species 4. Resolving conflict situations that involve kea
Kākā <i>Nestor meridionalis meridionalis</i> Ranked nationally as Category B	1. Population restricted and probably decreasing 2. Mustelid predation
Orange-fronted parakeet/kākāriki-whereo <i>Cyanoramphus malherbi</i> Ranked nationally as Category A	1. Small restricted population 2. Uncertainty over whether this species is distinct from yellow-crowned parakeets 3. Predation by mustelids
Black-fronted tern/tarapirohe <i>Sterna albobriata</i> Ranked nationally as Category B	Habitat deterioration through weed encroachment and increasing recreational use of riverbeds
Banded dotterel/pohowera <i>Charadrius bicinctus</i> Ranked nationally as Category C	Habitat deterioration through weed encroachment and increasing recreational use of riverbeds
Yellow-crowned parakeet/kākāriki-kōwhai <i>Cyanoramphus auriceps</i> Ranked nationally as Category B	1. Population restricted to small isolated pockets 2. Main threat thought to be predation by mustelids
Rock wren <i>Xenicus gilviventris</i> Ranked nationally as Category C	Status of population and whether there are any threats
Plants <i>Carex inopinata</i> Ranked nationally as Category A	1. Very restricted populations of few individuals 2. Competition with introduced grasses
Shrubby tororara <i>Muehlenbeckia astonii</i> Ranked nationally as Category A	1. A very large proportion of the New Zealand population is unprotected on Kaitorete Spit and subject to grazing 2. Lack of regeneration 3. Small population sizes elsewhere
<i>Australopyrum calcis</i> subsp. <i>optatum</i> Ranked nationally as Category A	1. Distribution not thoroughly assessed 2. Appears to be very restricted populations 3. Population may suffer from weed competition

Method**Results Sought****Place**

1. Develop effective resolution of kea/human conflict situations 2. Impact an advocacy strategy to publicise ways to reduce adverse impacts of kea and changing public perception of kea 3. Undertake research on kea population dynamics	1. Short-term: management of conflict situations effective 2. Heightened public perception of kea 3. Populations protected 4. Long-term: self-sustaining populations	Rangitata Waitaki Puketeraki Hurunui Waimakariri – high country foothills
Undertake predator control research on mustelids	1. Short-term: populations monitored 2. Long-term: self-sustaining populations	Waimakariri – Arthur's Pass National Park Hurunui – Lake Sumner, Lewis Pass
1. Monitor population to establish trend, size and distribution 2. Resolve question of genetic composition 3. Undertake predator control and research on mustelids	1. Short-term: established by survey 2. Long-term: self-sustaining populations	Waimakariri – Arthur's Pass National Park Hurunui – Lake Sumner
1. Advocate a riverbed code to minimise impacts 2. Maintain riverbed quality through weed control 3. Monitor population and nesting area	1. Short-term: deterioration of riverbed habitat prevented 2. Mid- to long-term: self-sustaining populations through continued habitat maintenance	Waimakariri Plains Rangitata Waitaki – braided river systems
1. Advocate to riverbed users to minimise impacts 2. RMA advocacy 3. Maintain habitat quality through weed control	Mid- to long-term: ensured survival of the population and its habitats	All places
Undertake research into effective ways to control mustelid populations	Mid-term: self-sustaining populations	Waimakariri – Arthur's Pass National Park Hurunui – Lake Sumner
Gather population and distribution information, as necessary	Mid- to long-term: population status and the existence of threats established	Hurunui Waimakariri Rangitata Waitaki – alpine areas
1. Short-term: use existing clones to establish plants in identified potential habitats 2. Medium-term: re-create habitats with shrubs and trees of the Castle Hill basin 3. Use of seeding material	Individual and populations established in the Castle Hill basin, representing a wider genetic base	Waimakariri – Castle Hill
1. Collect seed or cuttings in order to produce stock to plant into appropriate protected habitats/supplement populations 2. Protect regenerating populations by animal/weed control 3. Long-term: establish whether some grazing is compatible with maintenance of populations	Current populations regenerating and density and range expanded	Plains – Kaitorete Spit
1. Further survey for distribution 2. Establish monitoring on existing plants 3. Consider establishing further populations in the Castle Hill area 4. Determine composition of preferred habitat	1. Plants autecology understood 2. Self-sustaining populations	Waimakariri – Castle Hill

Species (and Ranking)**Issues***Helicbrysum dimorpbum*

Ranked nationally as Category A

1. Limited distribution
2. Regeneration failure in most populations
3. Animal control

Leptinella nana

Ranked nationally as Category A

1. Very restricted population
2. Population subject to trampling and weed competition

Climbing broom

Carmichaelia kirkii

Ranked nationally as Category B

1. Highly fragmented distribution
2. Populations of very small size
3. Lack of regeneration
4. No up-to-date knowledge of the status of population

Cypress hebe

Hebe cupressoides

Ranked nationally as Category B

1. Limited range
2. Several good populations that are limited/lack regeneration

Hebe armstrongii

Ranked nationally as Category B

1. Population structure aged
2. Browsing of adults/regeneration and pig rooting
3. Small population size in some cases

Myosotis colensoi

Ranked nationally as Category B

1. Limited distribution
2. Tramping in non-protected areas
3. Weed competition

Coprosma violacea – Category A*Alepis flavida* – Category B*Ipbigenia novae-zelandiae* – Category B*Peraxilla colensoi* – Category B*Peraxilla tetrapetala* – Category B*Pittosporum patulum* –

Category B

Swainsona novae-zelandiae – Category B*Urtica linearifolia* – Category B*Tupeia antarctica* – Category B*Eleocharis neozelandica* – Category B

Insufficient information

Isolepis basilaris – Category B

Insufficient information

Cardamine ‘tarn’ – Category B*Pseudognaphalium compactum* –
Category B

Insufficient information

Melicytus ‘Egmont’ – Category A*Myosotis lytteltonensis* – Category A*Olearia fragrantissima* – Category B*Senecio scaberulus* – Category B*Coprosma wallii* – Category B

Insufficient information

Method**Results Sought****Place**

1. Supplement wild populations 2. Maintain provenances 3. Monitor effects of rabbits/weeds/stock 4. Seek formal protection of key sites 5. Determine species autecology	1. Habitat requirements for long-term maintenance of the species at existing sites understood 2. New populations established	Waimakariri – Poulter Stream
1. Establish plants at other suitable sites in the area 2. Determine other suitable areas to establish new populations 3. Maintain provenances 4. Determine weed management strategy	Self-sustaining populations	Banks Peninsula – Port Hills
1. Undertake extensive surveys of sites (old records) 2. Collect and maintain provenances 3. Protect key sites 4. Supplement protected populations, consider introduction to new sites	Self-sustaining populations	Banks Peninsula – Port Levy Waimakariri – Poulter Stream Waitaki
1. Continued population enhancement in the Castle Hill basin 2. Seek formal protection of key sites 3. Initiate population enhancement in Waimakariri 4. Establish new populations of habitat available in protected areas 5. Establish hill provenance collection	1. Improved protection of existing populations 2. New populations established	Waimakariri – Cave Stream
1. Continue habitat restoration and supplementing the population of Enys Reserve 2. Continue animal control at the reserve 3. Continue monitoring of Mount White population 4. Maintain provenances 5. Seek formal protection of the Mount White population	1. Improved protection of populations 2. Animals controlled to allow effective regeneration 3. Self-sustaining populations	Waimakariri – Castle Hill
1. Minor existing protected areas 2. Undertake weeding in the Lance McCaskill Reserve 3. Survey to determine distribution	Self-sustaining populations	Waimakariri – Castle Hill
Obtain information through literature review and survey monitoring	Improved understanding of management priorities	All places
Obtain information through literature review and survey monitoring	Improved understanding of management priorities	Waimakariri – Plains
Obtain information through literature review and survey monitoring	Improved understanding of management priorities	Waimakariri
Obtain information through literature review and survey monitoring	Improved understanding of management priorities	Banks Peninsula

Species (and Ranking)**Issues**

Ischnocarpus novae-zelandiae –
Category B

Insufficient information

Amphibromus fluitans – Category A
Carmichaelia curta – Category B
Carmichaelia hollowayi – Category B
Crassula peduncularis – Category B

Insufficient information

Freshwater Fish

Canterbury mudfish/kōwaro
Neochanna burrowsius
Ranked nationally as Category B

1. Population small and restricted to habitats at risk from modification and drainage
2. Population status and distribution

Giant kōkopu/taiwharu
Galaxias argenteus
Ranked nationally as Category B

Habitat deterioration through modification and drainage

Short-jawed kōkopu
Galaxias prognathus
Ranked nationally as Category C

Habitat deterioration

Kōaro
Galaxias brevipinnis
Ranked nationally as Category C

Habitat deterioration

Banded kōkopu
Galaxias fasciatus
Ranked nationally as Category C

Habitat deterioration

Marine Mammals

Hector's dolphin/upokobue
Cephalorhynchus hectori
Ranked nationally as Category B

1. Banks Peninsula Marine Mammal Sanctuary
2. Population threat from drowning after being caught in set nets
3. Effects of increasing tourist interest in the population

<i>Method</i>	<i>Results Sought</i>	<i>Place</i>
Obtain information through literature review and survey monitoring	Improved understanding of management priorities	Rangitata
Obtain information through literature review and survey monitoring	Improved understanding of management priorities	Waitaki
1. Fish passage provision 2. Undertake survey to establish status and distribution 3. Provide suitable protected habitat 4. Avoid translocation of live aquatic life, which could adversely affect species 5. RMA advocacy	1. Short-term: known habitat protected; population distribution established 2. Mid- to long-term: a number of populations in protected habitats	Plains – South Canterbury
1. Ensure habitat is maintained and enhanced where possible 2. RMA advocacy 3. Fish passage protection	1. Short-term: known habitat maintained 2. Mid- to long-term: self-sustaining populations.	Plains – Horseshoe Lagoon
1. Ensure habitat is maintained and enhanced where possible 2. Avoid translocation of live aquatic life, which could adversely affect species 3. Fish passage provision	Mid- to long-term: known habitat maintained	Hurunui Waimakariri Rangitata Waitaki
1. Ensure habitat is maintained and enhanced where possible 2. RMA advocacy 3. Fish passage provision	Mid- to long-term: known habitat maintained	Banks Peninsula
1. Ensure habitat is maintained and enhanced 2. RMA advocacy 3. Fish passage provision	Mid- to long-term known habitat maintained	Banks Peninsula
1. Continued evaluation of Marine Mammal Sanctuary 2. Enforcement of set net rules 3. Continued population monitoring and monitoring of any activities that may impact on the population 4. Continued research on mitigation measures	1. Short-term: any further decline of the population prevented and threats to it minimised. 2. Mid- to long-term: self-sustaining populations All Canterbury coast	All Canterbury coast

Appendix 3

Historic Themes and

Actively Managed Historic Sites¹

This appendix identifies the main historical themes that relate to sites actively managed by the Canterbury Conservancy, and names the specific places:

1. Māori Occupation

Sub-themes: resource use, fortifications, rock shelters
Kura Tāwhiti (Castle Hill) rock shelters
Ripapa Island
Quail Island
Raincliff rock shelter and drawings
Weka Pass rock shelter and drawings

2. Exploration

Dr Sinclair's gravesite, Rangitata

3. Buildings, Settlement and Community

Sub-themes: education, immigration, power generation
Alpine Memorial
Cranmer Courts²
Fort Jervois, Ripapa Island
Monavale School
Nikau palm dendroglyphs, Nikau Palm Gully Scenic Reserve
Quail Island historic places³
Sawyer Stream hydroelectric power station

4. Transport and Communications

Acheron Accommodation House
Adderley Head signal station
Akaroa Head Scenic Reserve
Fort Jervois, Ripapa Island
Goldney Saddle settlement remains
Manson's Creek coaching stop site
Mt Pleasant Walkway historic places
Remains of Old Coach Road
West Coast Road: three historic places

5. Defence

Ripapa Island military installations⁴
Godley Head WWII military installations⁵
Mount Pleasant Walkway historic places⁶

6. Mountain Recreation and Tourism

Alpine Memorial
Bealey Spur Hut
First Ball Hut Site
First Hermitage site
Hooker Hut
Sawyer Stream hydroelectric power station
Sefton Bivouac
Sign of the Packhorse hut
Urquhart's Hut
Wakefield Track

7. Rural Industry

Sub-themes: farming, forestry
Acheron Accommodation House, Molesworth
Adderley Head signal station
Bealey Spur Hut
Birch Hill homestead
Burke's Hut site
Castle Hill
Jeanie Collier's gravesite
Langer Cottage, View Hill Scenic Reserve
Peel Forest Park Scenic Reserve⁷
Mt Pleasant Walkway historic places⁶
Quail Island historic places³
Staveley lime kilns

8. Extractive Industry

Adderley Head signal station
Staveley lime kilns
Urquhart's Hut⁸

1 Note: Sites either on land managed by the Department of Conservation or covenants, as set out in the draft Canterbury Historic Strategy.

2 Freehold with covenant on building.

3 Includes: Men's quarantine barracks, leper colony manager's house, animal quarantine stables and dog kennels, leper gravesite,

4 Includes: Workshop building; mine store and torpedo store building; primer test pit; jetty; armament and relics

5 Includes: Taylor Battery; underground war shelter; observation posts; officers' and sergeants' messes, searchlight emplacements, quartermaster's store, medical inspection room, engine-room, miniature range and plotting room buildings. Under lease to Lyttelton Port Company is the Godley Battery: a further three gun emplacements with magazines, war shelters and the radar building etc.

6 Includes: anti-aircraft battery and drystone farm walls, Lyttelton Scenic Reserve.

7 Includes: several saw pits, Mills Bush Track, Little Mt Peel boundary fence, Blandswood Flood Memorial.

8 A miner's old hut in the Wilberforce Conservation Area